The information published in this Undergraduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2019-2020 academic year, including the Summer Semester 2019, the Fall Semester 2019 and the Winter Semester 2020.

For your convenience the Undergraduate Calendar is available in PDF format.

If you wish to link to the Undergraduate Calendar please refer to the Linking Guidelines.

The University is a full member of:
- Universities Canada

Contact Information:
University of Guelph
Guelph, Ontario, Canada
N1G 2W1
519-824-4120
https://www.uoguelph.ca

Revision Information:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 6, 2019</td>
<td>Initial Publication</td>
</tr>
<tr>
<td>April 8, 2019</td>
<td>Second Publication</td>
</tr>
<tr>
<td>May 31, 2019</td>
<td>Third Publication</td>
</tr>
<tr>
<td>July 4, 2019</td>
<td>Forth Publication</td>
</tr>
<tr>
<td>July 19, 2019</td>
<td>Fifth Publication</td>
</tr>
</tbody>
</table>
Disclaimer

University of Guelph 2019

The information published in this Undergraduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2019-2020 academic year, including the Summer Semester 2019, the Fall Semester 2019 and the Winter Semester 2020.

The University reserves the right to change without notice any information contained in this calendar, including fees, any rule or regulation pertaining to the standards for admission to, the requirements for the continuation of study in, and the requirements for the granting of degrees or diplomas in any or all of its programs. The publication of information in this calendar does not bind the University to the provision of courses, programs, schedules of studies, or facilities as listed herein.

The University will not be liable for any interruption in, or cancellation of, any academic activities as set forth in this calendar and related information where such interruption is caused by fire, strike, lock-out, inability to procure materials or trades, restrictive laws or governmental regulations, actions taken by faculty, staff or students of the University or by others, civil unrest or disobedience, public health emergencies, or any other cause of any kind beyond the reasonable control of the University.

In the event of a discrepancy between a print version (downloaded) and the Web version, the Web version will apply.

Published by: Enrolment Services
Introduction

Collection, Use and Disclosure of Personal Information

Personal information is collected under the authority of the University of Guelph Act (1964), and in accordance with Ontario's Freedom of Information and Protection of Privacy Act (FIPPA) http://www.e-laws.gov.on.ca/index.html. This information is used by University officials in order to carry out their authorized academic and administrative responsibilities and also to establish a relationship for alumni and development purposes. Certain personal information is disclosed to external agencies, including the Ontario Universities Application Centre, the Ministry of Training, Colleges and Universities, and Statistics Canada, for statistical and planning purposes, and is disclosed to other individuals or organizations in accordance with the Office of Registrarial Services Departmental Policy on the Release of Student Information. For details on the use and disclosure of this information call the Office of Registrarial Services at the University at (519) 824-4120 or see http://www.uoguelph.ca/Registrar/registrar/index.cfm?index.

Disclosure of Personal Information to the Ontario Ministry of Training, Colleges and Universities

The University of Guelph is required to disclose personal information such as characteristics and educational outcomes to the Minister of Training, Colleges and Universities under s. 15 of the Ministry of Training, Colleges and Universities Act, R.S.O. 1990, Chapter M.19, as amended. The Ministry collects this data for purposes including but not limited to planning, allocating and administering public funding to colleges, universities and other post-secondary educational and training institutions.

Amendments made to the Ministry of Training, Colleges and Universities Act, authorizing the collection and use of personal information from colleges and universities by the Minister which were set out in Schedule 5 of the Childcare Modernization Act, 2014, came into force on March 31, 2015.

The amendments strengthen the ability of the Minister to directly or indirectly collect and use personal information about students as required to conduct research and analysis, including longitudinal studies, and statistical activities conducted by or on behalf of the Ministry for purposes that relate to post-secondary education and training, including,

i. understanding the transition of students from secondary school to post-secondary education and training,
ii. understanding student participation and progress, mobility and learning and employment outcomes,
iii. understanding linkages among universities, colleges, secondary schools and other educational and training institutions prescribed by regulation,
iv. understanding trends in post-secondary education or training program choices made by students,
 v. understanding sources and patterns of student financial resources, including financial assistance and supports provided by government and post-secondary educational and training institutions,
vi. planning to enhance the affordability and accessibility of post-secondary education and training and the quality and effectiveness of the post-secondary sector,

and

vii. identifying conditions or barriers that inhibit student participation, progress, completion and transition to employment or future post-secondary educational or training opportunities, and

viii. developing key performance indicators.

Information that the University is required to provide includes but is not limited to: first, middle and last name, Ontario Educational Number, citizenship, date of birth, gender, first three digits of a student’s postal code, mother tongue, degree program and major(s) in which the student is enrolled, year of study and whether the student has transferred from another institution.

Further information on the collection and use of student-level enrolment-related data can be obtained from the Ministry of Training, Colleges and Universities website: https://www.ontario.ca/page/ministry-advanced-education-and-skills-development (English) or https://www.ontario.ca/fr/page/ministere-de-lenseignement-supérieur-et-de-la-formation-professionnelle, (French) or by writing to the Director, Postsecondary Finance and Information Management Branch, Postsecondary Education Division, 7th Floor, Mowat Block, 900 Bay Street, Toronto, ON M7A 1L2.


Authority to Disclose Personal Information to Statistics Canada

The Ministry of Training, Colleges and Universities discloses student-level enrolment-related data it collects from the colleges and universities as required by Statistics Canada in accordance with Section 13 of the Federal Statistics Act. This gives the Ministry authority to disclose personal information in accordance with s. 42(1) (e) of FIPPA

Notification of Disclosure of Personal Information to Statistics Canada

Frequently Asked Questions related to the Ministry’s enrolment and OEN data activities are also posted at: http://www.tcu.gov.on.ca/peps/publications/NoticeOfCollection.pdf

Address for University Communication

Depending on the nature and timing of the communication, the University may use one of these addresses to communicate with students. Students are, therefore, responsible for checking all of the following on a regular basis:

Email Address

The University issued email address is considered an official means of communication with the student and will be used for correspondence from the University. Students are responsible for monitoring their University-issued email account regularly. See Section I--Statement of Students' Academic Responsibilities for more information.

Home Address

Students are responsible for maintaining a current mailing address with the University. Address changes can be made, in writing, through Enrolment Services.

Name Changes

The University of Guelph is committed to the integrity of its student records, therefore, each student is required to provide either on application for admission or on personal data forms required for registration, his/her complete, legal name. Any requests to change a name, by means of alteration, deletion, substitution or addition, must be accompanied by appropriate supporting documentation.

Student Confidentiality and Release of Student Information Policy Excerpt

The University undertakes to protect the privacy of each student and the confidentiality of his or her record. To this end the University shall refuse to disclose personal information to any person other than the individual to whom the information relates where disclosure would constitute an unjustified invasion of the personal privacy of that person or of any other individual. All members of the University community must respect the confidential nature of the student information which they acquire in the course of their work.

Learning Outcomes

On December 5, 2012, the University of Guelph Senate approved five University-wide Learning Outcomes as the basis from which to guide the development of undergraduate degree programs, specializations and courses:

1. Critical and Creative Thinking
2. Literacy
3. Global Understanding
4. Communicating
5. Professional and Ethical Behaviour

These learning outcomes are also intended to serve as a framework through which our educational expectations are clear to students and the broader public; and to inform the process of outcomes assessment through the quality assurance process (regular reviews) of programs and departments.

An on-line guide to the learning outcomes, links to the associated skills, and detailed rubrics designed to support the development and assessment of additional program and discipline-specific outcomes, are available for reference on the Learning Outcomes website.

1. Critical and Creative Thinking

Critical and creative thinking is a concept in which one applies logical principles, after much inquiry and analysis, to solve problems with a high degree of innovation, divergent thinking and risk taking. Those mastering this outcome show evidence of integrating knowledge and applying this knowledge across disciplinary boundaries. Depth and breadth of understanding of disciplines is essential to this outcome.

In addition, Critical and Creative Thinking includes, but is not limited to, the following outcomes: Inquiry and Analysis; Problem Solving; Creativity; and Depth and Breadth of Understanding.

2. Literacy

Literacy is the ability to extract information from a variety of resources, assess the quality and validity of the material, and use it to discover new knowledge. The comfort in using quantitative literacy also exists in this definition, as does using technology effectively and developing visual literacy.

In addition, Literacy includes, but is not limited to, the following outcomes: Information Literacy, Quantitative Literacy, Technological Literacy, and Visual Literacy.

3. Global Understanding:

Global understanding encompasses the knowledge of cultural similarities and differences, the context (historical, geographical, political and environmental) from which these arise, and how they are manifest in modern society. Global understanding is exercised as civic engagement, intercultural competence and the ability to understand an academic discipline outside of the domestic context.

In addition, Global Understanding includes, but is not limited to, the following outcomes: Global Understanding, Sense of Historical Development, Civic Knowledge and Engagement, and Intercultural Competence.

4. Communicating

Communicating is the ability to interact effectively with a variety of individuals and groups, and convey information successfully in a variety of formats including oral and written communication. Communicating also comprises attentiveness and listening, as well as reading comprehension. It includes the ability to communicate and synthesize information, arguments, and analyses accurately and reliably.

In addition, Communicating includes, but is not limited to, the following outcomes: Oral Communication, Written Communication, Reading Comprehension, and Integrative Communication.

5. Professional and Ethical Behaviour

Professional and ethical behaviour requires the ability to accomplish the tasks at hand with proficient skills in teamwork and leadership, while remembering ethical reasoning behind all decisions. The ability for organizational and time management skills is essential in bringing together all aspects of managing self and others. Academic integrity is central to mastery in this outcome.

In addition, Professional and Ethical Behaviour includes, but is not limited to, the following outcomes: Teamwork, Ethical Reasoning, Leadership, and Personal Organization and Time Management.
## Table of Contents

**I. Statement of Students’ Academic Responsibilities** ................................................. 1

**II. The University** ........................................................................................................ 2

  - History .................................................................................................................. 2
  - Academic Organization ......................................................................................... 2
  - University of Guelph-Humber ........................................................................... 2
  - Mission Statement ............................................................................................ 2
  - University Governance ..................................................................................... 2

**III. Schedule of Dates** .................................................................................................. 3

  - Summer Semester 2019 .................................................................................... 3
  - Summer Session 2019 (6 Week Format) ............................................................ 3
  - Fall Semester 2019 ........................................................................................... 3
  - D.V.M. Fall Semester 2019 ............................................................................... 4
  - Winter Semester 2020 ....................................................................................... 4
  - D.V.M. Winter Semester 2020 ......................................................................... 4

**IV. Admission Information** .......................................................................................... 5

  - Admission Requirements to University Programs ......................................... 5
    - Semester One Admission ................................................................................ 5
    - Advanced Standing Admission .................................................................... 6
    - Advanced Standing Entry Points .................................................................. 7
  - Application Procedures .................................................................................... 7
    - Applicants from Ontario Currently Enrolled in Secondary School ............. 7
    - Applicants from Ontario Not Currently Enrolled in Secondary School ...... 7
    - All Other External Students ........................................................................ 7
  - Applying From Outside Canada ....................................................................... 8
  - Applying From Another Campus of the University of Guelph ...................... 8
  - Applying For Internal Transfer or Readmission .............................................. 8
  - Amendments to the Application Form ............................................................. 8
  - Articulation and Pathway Agreements ............................................................. 8
  - Associate Diploma Programs .......................................................................... 8
  - Communication of Admission Decisions ......................................................... 8
  - Co-operative Education ................................................................................... 8
  - Deadline Dates - Advanced Standing and Non-Degree Programs ................ 8

**V. International Study** .................................................................................................. 9

  - Open Learning .................................................................................................... 9
  - Post-Degree and Letter of Permission ............................................................... 9
    - Second Degrees .............................................................................................. 9
    - Honours Equivalent ....................................................................................... 9
    - Prior Learning Assessment (PLA) ................................................................. 9
  - Readmission ....................................................................................................... 10
  - Right of Selection .............................................................................................. 10
  - Specific Subject Requirements and Recommendations ............................ 10
    - University of Guelph Programs ................................................................ 10
    - University of Guelph-Humber Programs ................................................... 12
  - Submission of Documents .................................................................................. 13
  - Use of Animals in Teaching ............................................................................. 13

**VI. Schedule of Fees** .................................................................................................... 14

  - Program Counsellors ....................................................................................... 14
  - Undergraduate Academic Information Centre ............................................... 19
  - Undergraduate Students .................................................................................. 20
  - Interpretation of University Academic Regulations ...................................... 20
  - Non-Academic Counselling ............................................................................. 20
  - Program Approval ............................................................................................ 20

**VIII. Undergraduate Degree Regulations and Procedures** ........................................ 21

  - General Information .......................................................................................... 21
  - Academic Consideration, Appeals and Petitions ............................................ 21
    - General Information for Academic Consideration and Appeals ............... 21
    - Process for Academic Consideration and Appeals ..................................... 21
    - Academic Consideration ............................................................................. 23
    - Academic Accommodation of Religious Obligations .................................. 23
  - Academic Accommodation for Students with Disabilities - Policy ............... 23
    - 1. Purpose, Scope and Definitions ................................................................ 23
    - 2. Principles for the Provision of Academic Accommodation .................... 24
    - 3. Periodic Review Process .......................................................................... 24
    - 4. Relevant Legislation & External Policy .................................................... 24
    - 5. Related University Policies, Procedures & Documents ............................ 24
  - Academic Accommodation for Students with Disabilities - Procedures ....... 24
    - 1. Purpose, Scope .......................................................................................... 24
    - 2. Essential Requirements and Academic Accommodation ....................... 24
    - 3. Student Accessibility Services (SAS) ......................................................... 24
    - 4. Documentation Requirements .................................................................. 25
    - 5. Requests for In-Course Academic Accommodation ................................. 25
    - 6. Supplementary Academic Accommodation Decision Process ............... 25
    - 7. Appeal Process .......................................................................................... 25
  - Academic Load .................................................................................................. 26
    - Full-time ......................................................................................................... 26
    - Part-time ......................................................................................................... 26
  - Academic Misconduct ....................................................................................... 26
    - Education and Remediation ........................................................................ 26
    - Offences .......................................................................................................... 26
    - Penalties .......................................................................................................... 27
    - Procedures ....................................................................................................... 27
    - Appeals ........................................................................................................... 28
    - Record of Academic Misconduct ................................................................ 29
    - Guidelines for Penalties for Academic Misconduct ..................................... 29

**Academic Review Sub-Committee Procedures** .......................................................... 30

**Academic Standing** ..................................................................................................... 31

  - Eligible to Continue .......................................................................................... 31
  - Probationary ....................................................................................................... 31
  - Required to Withdraw ....................................................................................... 31

**Adding Courses** ......................................................................................................... 31

  - Course Requirements ...................................................................................... 31
  - Distance Education Courses ........................................................................... 31
  - Program Approval ............................................................................................ 31
  - Regular Courses ............................................................................................... 31
  - Two-Semester Courses ..................................................................................... 31

**Address for University Communication** .................................................................... 31

  - Email Address ................................................................................................. 31
  - Home Address .................................................................................................... 31

**Admissions** ................................................................................................................. 31

  - Associated Program Requirements .................................................................. 31
  - Attendance at Class .......................................................................................... 31
  - Auditing Courses .............................................................................................. 32

**Class Level Calculation** ............................................................................................. 32

**Credit Standing** .......................................................................................................... 32

**Continuation of Study** ............................................................................................... 32

  - Schedule 1 ........................................................................................................ 32
  - Schedule 2 .......................................................................................................... 33

**Course Sections** ......................................................................................................... 33

  - Department Chair’s Responsibilities ................................................................ 33
  - Registrar’s Responsibilities ............................................................................... 33
  - Student’s Responsibilities ................................................................................. 33

**Course Selection** ........................................................................................................ 33

  - New Students ..................................................................................................... 33
  - In-Course Students ............................................................................................. 33

**Dean’s Honours List** ................................................................................................... 34

**Deferred Privileges** .................................................................................................... 34

  - Procedures for Deferred Privileges ................................................................. 35

**Dropping Courses** ..................................................................................................... 35

  - Deadline Dates .................................................................................................. 35
  - Instructor Notification ......................................................................................... 35
  - Refunds ................................................................................................................ 36
  - Regular Courses ................................................................................................. 36
  - Two-Semester Courses ....................................................................................... 36

**VII. Academic Advising** ............................................................................................... 19

  - Council on Undergraduate Academic Advising ........................................... 19
  - Faculty Advisors ............................................................................................... 19

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
<table>
<thead>
<tr>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examinations .................................................. 36</td>
</tr>
<tr>
<td>Mid-Term Examinations .......................................... 36</td>
</tr>
<tr>
<td>Final Examinations/Assignments and Final Week of Classes ... 36</td>
</tr>
<tr>
<td>Policy on Student Access to Final Examination Materials ... 38</td>
</tr>
<tr>
<td>Exchange Programs ............................................... 38</td>
</tr>
<tr>
<td>Failed Courses .................................................... 38</td>
</tr>
<tr>
<td>Multiple Failure Limitations ..................................... 38</td>
</tr>
<tr>
<td>Grading System ................................................... 38</td>
</tr>
<tr>
<td>Alternate Grading System ......................................... 38</td>
</tr>
<tr>
<td>Other Grade Notations ............................................ 39</td>
</tr>
<tr>
<td>Grading Procedures ............................................... 39</td>
</tr>
<tr>
<td>Submission of Final Grades ...................................... 40</td>
</tr>
<tr>
<td>Release of Final Grades .......................................... 40</td>
</tr>
<tr>
<td>Grade Reassessment ................................................ 40</td>
</tr>
<tr>
<td>Calculation Errors or Omissions .................................. 40</td>
</tr>
<tr>
<td>Methods or Criteria Used in Establishing Final Grades ........ 40</td>
</tr>
<tr>
<td>Misapplication of an Academic Regulation or Procedure ..... 41</td>
</tr>
<tr>
<td>Graduate Courses .................................................. 41</td>
</tr>
<tr>
<td>Bachelor of Arts and Science .................................... 41</td>
</tr>
<tr>
<td>Bachelor of Science in Agriculture .............................. 41</td>
</tr>
<tr>
<td>Bachelor of Commerce ............................................. 41</td>
</tr>
<tr>
<td>Bachelor of Computer .............................................. 41</td>
</tr>
<tr>
<td>Bachelor of Engineering ........................................... 41</td>
</tr>
<tr>
<td>Bachelor of Science ................................................. 41</td>
</tr>
<tr>
<td>Bachelor of Science in Agriculture .............................. 41</td>
</tr>
<tr>
<td>Bachelor of Science in Environmental Sciences ................. 41</td>
</tr>
<tr>
<td>Bachelor of Science in Technology ................................ 41</td>
</tr>
<tr>
<td>Bachelor of Veterinary Medicine .................................. 41</td>
</tr>
<tr>
<td>Other Forms of Financial Assistance ............................ 357</td>
</tr>
<tr>
<td>Bachelor of Arts and Science .................................... 41</td>
</tr>
<tr>
<td>Bachelor of Bio-Resource Management Degree .................... 121</td>
</tr>
<tr>
<td>Entrance Scholarships ............................................. 121</td>
</tr>
<tr>
<td>Entrance Scholarships with Financial Need ...................... 121</td>
</tr>
<tr>
<td>Entrance Bursaries ............................................... 125</td>
</tr>
<tr>
<td>In-course Scholarships ............................................ 126</td>
</tr>
<tr>
<td>In-course Scholarships with Financial Need ................. 133</td>
</tr>
<tr>
<td>In-course Bursaries ................................................. 134</td>
</tr>
<tr>
<td>In-course Travel Grants ............................................ 139</td>
</tr>
<tr>
<td>Bachelor of Commerce ............................................. 140</td>
</tr>
<tr>
<td>Entrance Scholarships ............................................. 140</td>
</tr>
<tr>
<td>Entrance Scholarships with Financial Need ...................... 143</td>
</tr>
<tr>
<td>Entrance Bursaries ............................................... 143</td>
</tr>
<tr>
<td>In-course Scholarships ............................................ 146</td>
</tr>
<tr>
<td>In-course Scholarships with Financial Need ................. 162</td>
</tr>
<tr>
<td>In-course Bursaries ................................................. 164</td>
</tr>
<tr>
<td>In-course Travel Grants ............................................. 171</td>
</tr>
<tr>
<td>Bachelor of Computing ............................................. 172</td>
</tr>
<tr>
<td>Entrance Scholarships ............................................. 172</td>
</tr>
<tr>
<td>Entrance Scholarships with Financial Need ...................... 174</td>
</tr>
<tr>
<td>Entrance Bursaries ............................................... 175</td>
</tr>
<tr>
<td>In-course Scholarships ............................................ 176</td>
</tr>
<tr>
<td>In-course Scholarships with Financial Need ................. 183</td>
</tr>
<tr>
<td>In-course Bursaries ................................................. 184</td>
</tr>
<tr>
<td>Bachelor of Engineering ........................................... 189</td>
</tr>
<tr>
<td>Entrance Scholarships ............................................. 189</td>
</tr>
<tr>
<td>Entrance Scholarships with Financial Need ...................... 192</td>
</tr>
<tr>
<td>Entrance Bursaries ............................................... 193</td>
</tr>
<tr>
<td>In-course Scholarships ............................................ 194</td>
</tr>
<tr>
<td>In-course Scholarships with Financial Need ................. 201</td>
</tr>
<tr>
<td>In-course Bursaries ................................................. 203</td>
</tr>
<tr>
<td>In-course Travel Grants ............................................. 203</td>
</tr>
<tr>
<td>Bachelor of Science ................................................. 228</td>
</tr>
<tr>
<td>Entrance Scholarships ............................................. 228</td>
</tr>
<tr>
<td>Entrance Scholarships with Financial Need ...................... 230</td>
</tr>
<tr>
<td>Entrance Bursaries ............................................... 234</td>
</tr>
<tr>
<td>In-course Scholarships ............................................ 235</td>
</tr>
<tr>
<td>In-course Scholarships with Financial Need ................. 255</td>
</tr>
<tr>
<td>In-course Bursaries ................................................. 260</td>
</tr>
<tr>
<td>In-course Travel Grants ............................................. 267</td>
</tr>
<tr>
<td>Bachelor of Science in Agriculture .............................. 268</td>
</tr>
<tr>
<td>Entrance Scholarships ............................................. 268</td>
</tr>
<tr>
<td>Entrance Scholarships with Financial Need ...................... 271</td>
</tr>
<tr>
<td>Entrance Bursaries ............................................... 272</td>
</tr>
<tr>
<td>In-course Scholarships ............................................ 272</td>
</tr>
<tr>
<td>In-course Scholarships with Financial Need ................. 272</td>
</tr>
<tr>
<td>In-course Bursaries ................................................. 272</td>
</tr>
<tr>
<td>In-course Travel Grants ............................................. 272</td>
</tr>
<tr>
<td>Bachelor of Science in Environmental Sciences ................. 293</td>
</tr>
<tr>
<td>Entrance Scholarships ............................................. 293</td>
</tr>
<tr>
<td>Entrance Scholarships with Financial Need ...................... 296</td>
</tr>
<tr>
<td>Entrance Bursaries ............................................... 297</td>
</tr>
<tr>
<td>In-course Scholarships ............................................ 299</td>
</tr>
<tr>
<td>In-course Scholarships with Financial Need ................. 311</td>
</tr>
<tr>
<td>In-course Bursaries ................................................. 314</td>
</tr>
<tr>
<td>In-course Travel Grants ............................................. 320</td>
</tr>
<tr>
<td>Bachelor of Science in Technology ................................ 321</td>
</tr>
<tr>
<td>Entrance Scholarships ............................................. 321</td>
</tr>
<tr>
<td>Entrance Scholarships with Financial Need ...................... 324</td>
</tr>
<tr>
<td>Entrance Bursaries ............................................... 325</td>
</tr>
<tr>
<td>In-course Scholarships ............................................ 332</td>
</tr>
<tr>
<td>In-course Scholarships with Financial Need ................. 334</td>
</tr>
<tr>
<td>In-course Bursaries ................................................. 334</td>
</tr>
<tr>
<td>Doctor of Veterinary Medicine .................................... 338</td>
</tr>
<tr>
<td>Entrance Scholarships ............................................. 338</td>
</tr>
<tr>
<td>Entrance Scholarships with Financial Need ...................... 338</td>
</tr>
<tr>
<td>Entrance Bursaries ............................................... 338</td>
</tr>
<tr>
<td>In-course Scholarships ............................................ 339</td>
</tr>
<tr>
<td>In-course Scholarships with Financial Need ................. 348</td>
</tr>
<tr>
<td>In-course Bursaries ................................................. 350</td>
</tr>
<tr>
<td>Open Learning and Educational Support Awards ................. 357</td>
</tr>
</tbody>
</table>
Table of Contents

Ontario Student Assistance Program (OSAP) ........................................... 357
Out of Province Student Assistance Programs ...................................... 357

X. Degree Programs ................................................................................. 358

Specializations and Their Degrees .......................................................... 358

Bachelor of Applied Science (B.A.Sc.) ...................................................... 362

Program Information .............................................................................. 362
Adult Development (ADEV) ................................................................. 362
Adult Development (Co-op) (ADEV-C) .................................................. 363
Applied Human Nutrition (AHN) .......................................................... 364
Child, Youth and Family (CYF) ............................................................. 365
Child, Youth and Family (Co-op) (CYF-C) ........................................... 366

Bachelor of Arts (B.A.) ............................................................................. 368

Program Information .............................................................................. 368
Anthropology (ANTH) ........................................................................... 370
Art History (ARKH) ............................................................................... 370
Arts, Culture and Heritage Management (ACHM) ................................ 371
Business (BUS) ...................................................................................... 371
Business Economics (BECN) ................................................................. 372
Classical Studies (CLAS) ...................................................................... 372
Computing and Information Science (CIS) .......................................... 372
Creative Writing (CW) ........................................................................... 372
Criminal Justice and Public Policy (CJPP) ............................................ 373
Economics (ECON) ............................................................................... 373
Economics (Co-op) (ECON-C) ............................................................... 374
English (ENGL) .................................................................................... 375
Environmental Governance (EGOV) ................................................... 375
European Culture and Civilization (ECC) .......................................... 376
European Studies (EURS) .................................................................. 376
Family and Child Studies (FCS) ............................................................ 377
Food, Agricultural and Resource Economics (FARE) ......................... 378
French Studies (FREN) ........................................................................ 378
Geography (GEOG) .............................................................................. 379
German (GERM) .................................................................................. 379
History (HIST) ...................................................................................... 379
Human Resources (HR) ....................................................................... 380
Individual Studies (IS) .......................................................................... 381
International Development Studies (IDS) ............................................ 381
International Development Studies (Co-op) (IDS:C) ......................... 382
Italian (ITAL) ....................................................................................... 384
Marketing (KTG) .................................................................................. 384
Mathematical Economics (MAEC) ...................................................... 384
Mathematical Economics (Co-op) (MAEC:C) .................................... 385
Mathematics (MATH) ............................................................................ 385
Mathematics (Co-op) (MATH:C) .......................................................... 385
Media & Cinema Studies (MCST) .......................................................... 386
Museum Studies (MS) .......................................................................... 387
Music (MUSC) ...................................................................................... 387
Philosophy (PHIL) ................................................................................ 387
Political Science (POLS) ..................................................................... 388
Political Science (Co-op) (POLS:C) ..................................................... 389
Psychology (PSYC) .............................................................................. 390
Psychology (Co-op) (PSYC:C) ............................................................. 391
Sociology (SOC) ................................................................................... 392
Spanish and Hispanic Studies (SHPH) ............................................... 393
Statistics (STAT) .................................................................................. 394
Studio Art (SART) ................................................................................ 394
Theatre Studies (THST) ....................................................................... 395

Bachelor of Arts and Sciences (B.A.S.) ................................................... 396

Program Information .............................................................................. 396

Bachelor of Bio-Resource Management Degree (B.B.R.M.) ............ 398

Program Information .............................................................................. 398
Environmental Management Major (EM) .......................................... 398
Equine Management Major (EQM) ....................................................... 399
Food Industry Management (FIM) ....................................................... 400
Forestry Industry Management (Co-op) (FIMC) ................................ 401

Bachelor of Commerce (B.Comm.) .......................................................... 403

Program Information .............................................................................. 403
Undeclared (UND) ................................................................................ 404
Accounting (ACCT) ............................................................................. 404
Accounting (Co-op) (ACCT:C) ............................................................. 405
Food and Agricultural Business (FAB) .............................................. 405
Food and Agricultural Business (Co-op) (FAB-C) ............................ 406
Hospitality and Tourism Management (HTM) ..................................... 407
Hospitality and Tourism Management Co-op (HTM-C) .................... 408
Management (MGMT) ......................................................................... 409
Management (Co-op) (MGMT:C) ....................................................... 410
Management Economics and Finance (MEF) ..................................... 411

Management Economics and Finance (Co-op) (MEF:C) ............... 412
Marketing Management (MKMN) ....................................................... 414
Marketing Management (Co-op) (MKMN-C) ..................................... 414
Public Management (PMGT) ............................................................... 416
Public Management (Co-op) (PMGT:C) ............................................ 417
Real Estate and Housing (REH) ............................................................ 418
Real Estate and Housing (Co-op) (REH-C) ........................................ 419

Bachelor of Computing (B.Comp.) ............................................................ 421

Program Information .............................................................................. 421
General Program .................................................................................. 421
Computer Science (CS) ........................................................................ 421
Computer Science (Co-op) (CS:C) ....................................................... 421
Software Engineering (SENG) .............................................................. 422
Software Engineering (Co-op) (SENG:C) ............................................ 422

Bachelor of Engineering [B.Eng.] ............................................................. 424

Program Information .............................................................................. 424
Undeclared First Year Entry - B.Eng. Program ..................................... 424
Biological Engineering Program (BIOE) ............................................. 425
Biological Engineering Program Co-op (BIOE:C) .............................. 425
Biomedical Engineering Program (BME) .......................................... 426
Biomedical Engineering Program Co-op (BME:C) ............................ 427
Computer Engineering Program (CENG) .......................................... 427
Computer Engineering Program Co-op (CENG:C) ............................ 428
Engineering Systems and Computing Program (ESC) ....................... 429
Environmental Engineering Program (ENVE) ................................... 430
Environmental Engineering Program Co-op (ENVE:C) ................. 431
Food Engineering (FENG) ................................................................. 431
Mechanical Engineering Program (MECH) ....................................... 432
Mechanical Engineering Program Co-op (MECH:C) ....................... 433
Water Resources Engineering Program (WRE) .................................. 433
Water Resources Engineering Program Co-op (WRE:C) ............... 433

Bachelor of Landscape Architecture (B.L.A.) ....................................... 435

Program Information .............................................................................. 435
Schedule of Studies .............................................................................. 435

Bachelor of Science (B.Sc.) ................................................................. 436

The Three Semester System .................................................................. 436
Transfer from One B.Sc. Program to Another .................................... 436
Program Information .............................................................................. 436
Special Study Options .......................................................................... 436
Doctor of Veterinary Medicine ............................................................ 437
General Program (BSCG) .................................................................... 437
Honours Programs (BSCH) ................................................................. 438
Animal Biology (ABIO) ........................................................................ 438
Biochemistry (BIOC) ............................................................................ 438
Biochemistry (Co-op) (BIOC:C) .......................................................... 439
Biodiversity (BIO) ................................................................................. 441
Biological and Medical Physics (BMPH) .................................................. 442
Biological and Medical Physics (Co-op) (BMPH:C) .......................... 442
Biological and Pharmaceutical Chemistry (BPCH) ........................ 443
Biological and Pharmaceutical Chemistry (Co-op) (BPCH:C) .......... 444
Biological Science (BIOS) .................................................................... 445
Biology (BIOL) .................................................................................... 446
Bio-Medical Science (BIOM) ............................................................... 446
Biomedical Toxicology (BOTOX) .......................................................... 447
Biomedical Toxicology (Co-op) (BOTOX:C) ...................................... 447
Biotechnology (BIOT) .......................................................................... 448
Business Economics (BECN) ............................................................... 448
Chemical Physics (CHPF) ................................................................... 449
Chemical Physics (Co-op) (CHPF:C) .................................................. 449
Chemistry (CHEM) ............................................................................... 450
Chemistry (Co-op) (CHEM:C) .............................................................. 451
Computing and Information Science (CIS) ....................................... 451
Ecology (ECOL) .................................................................................. 452
Environmental Biology (ENVB) .......................................................... 452
Environmental Geomatics (EG) ........................................................... 453
Environmental Geomatics (Co-op) (EG:C) .......................................... 453
Food Science (FOOD) .......................................................................... 454
Food Science (Co-op) (FOOD:C) ......................................................... 455
Geographic Information Systems (GIS) and Environmental Analysis 456
Human Kinetics (HK) ........................................................................... 456
Marine and Freshwater Biology (MBF) .............................................. 456
Marine and Freshwater Biology (Co-op) (MBF:C) ............................ 457
Mathematical Science (MSCI) ............................................................. 458
Mathematics (MATH) ........................................................................... 459
Microbiology (MICR) .......................................................................... 459
Microbiology (Co-op) (MICR:C) .......................................................... 460

Last Revision: July 4, 2019 2019-2020 Undergraduate Calendar
### Table of Contents

- Molecular Biology and Genetics (MBG) ........................................... 461
- Nanoscience (NANO) ............................................................. 462
- Nanoscience (NANO:O) ........................................................... 462
- Neuroscience (NEUR) ............................................................. 463
- Nutritional and Nutraceutical Sciences (NANS) ............................ 465
- Physical Science (PSCI) ............................................................ 465
- Physics (PHYS) ................................................................. 467
- Physics (Co-op) (PHYS:C) ......................................................... 467
- Plant Science (PLSC) .............................................................. 468
- Statistics (STAT) ..................................................................... 470
- Theoretical Physics (TPHYS) ...................................................... 471
- Wildlife Biology and Conservation (WBC) .................................... 470
- Zoology (ZOO) ........................................................................ 471

**Bachelor of Science in Agriculture [B.Sc.(Agr.)]** .................................. 473

Program Information ........................................................................ 473
Honours Agriculture (AGRS) ........................................................... 473
Agriculture (AGR) ........................................................................ 474
Animal Science (ANSC) ................................................................. 475
Crop, Horticulture and Turfgrass Sciences (CHAT) ............................ 476

**Bachelor of Science in Environmental Sciences [B.Sc.(Env.)]** .......... 478

Program Information ........................................................................ 478
Ecology (ECOL) ........................................................................... 478
Ecology (ECOL:C) ................................................................. 479
Environmental Sciences (ENVS) ..................................................... 480
Environmental Sciences (ENVS:C) .................................................. 481
Environmental Economics and Policy (EEEP) ................................. 483
Environmental Economics and Policy (EEEP:C) .............................. 484
Environment and Resource Management (ERM) ............................ 485
Environment and Resource Management (ERM:C) .......................... 485

**Doctor of Veterinary Medicine (D.V.M.)** ....................................... 486

Program Information ....................................................................... 487
Schedule of Studies ......................................................................... 488

**Co-operative Education Programs** .............................................. 489

Admission Information ..................................................................... 489
Eligibility ....................................................................................... 489
Continuation of Study ...................................................................... 489
Release of Academic Information ..................................................... 489
Procedures for Work Term Reports .................................................. 489
Conditions for Graduation ............................................................... 489
Co-op Fees ................................................................................ 489
Schedule of Studies ......................................................................... 490

**University of Guelph-Humber** ....................................................... 491

**Associate Diploma Programs** ....................................................... 492

**XI. Special Study Opportunities** .................................................. 493

Certificates and Diplomas .............................................................. 493
Certificate in Business .................................................................... 493
Certificate in Civic Engagement and Global Citizenship ..................... 493
Certificate in Communication Process: Bridging Theory and Practice ........................................... 493
Certificate in Environmental Citizenship ........................................... 493
Certificate in Environmental Conservation ........................................ 494
Certificate in Food Science .............................................................. 494
Certificate in German Language and Culture ..................................... 494
Certificate in Hospitality Studies ...................................................... 494
Certificate in Leadership .................................................................. 494
Certificate in Organic Agriculture ..................................................... 495
Certificate in Public Policy and Administration .................................. 495
Certificate in Spanish Language and Culture ...................................... 495
Diploma in Applied Statistics ............................................................ 495
Co-operative Education .................................................................. 495

Co-operative Education Guidelines and Procedures ......................... 495
Guidelines for the Establishment of Co-op Programs: ......................... 496
Roles and Responsibilities of Co-operative Education Program Partners ........................................... 496
Distance Education ......................................................................... 497

**General Studies** ......................................................................... 498

Academic Counselling ..................................................................... 498
Financial Assistance ....................................................................... 498
Schedule of Studies ......................................................................... 498
Tuition Fees ................................................................................ 498
Undergraduate Regulations ............................................................... 498

**Graduate Studies** ........................................................................... 498

**Interdisciplinary Studies** .............................................................. 498

Bachelor of Arts ............................................................................ 498
Bachelor of Arts and Sciences ......................................................... 498
Bachelor of Commerce ................................................................. 498
Bachelor of Science in Environmental Sciences .................................. 498

**Open Learning** ............................................................................ 498

Open Learning and Educational Support (OpenEd) .......................... 498

The Open Learning program ............................................................ 498
Continuing Education Option .......................................................... 499
Guaranteed Admission to a BA Program .......................................... 499
Guaranteed Admission to the B.Comm. Program ................................. 499
Open Learning program Certificates and Diplomas ............................ 499
Open Learning program Courses* .................................................... 499
Open Learning and Educational Support Scholarships/Bursaries ............ 499
Distance Education ......................................................................... 499
Continuing Education ................................................................. 499

**Summer Studies (Summer Semester)** ........................................... 503

**XII. Course Descriptions** ........................................................... 504

**General Information** .................................................................. 504

Course Labelling and Levels ............................................................ 504
Course Information ....................................................................... 504
Course Prerequisites ....................................................................... 504
Course Equates and Restrictions ...................................................... 504
Accounting .................................................................................... 505
Agriculture ..................................................................................... 507
Anatomy ....................................................................................... 509
Animal Science ............................................................................ 510
Anthropology .................................................................................. 512
Arabic ............................................................................................. 514
Art History .................................................................................... 515
Arts and Sciences .......................................................................... 518
Biochemistry .................................................................................. 519
Biology ............................................................................................ 520
Biomedical Sciences ........................................................................ 523
Botany ............................................................................................. 523
Business ........................................................................................ 526
Chemistry ........................................................................................ 527
Chinese ........................................................................................ 529
Classic Studies ............................................................................. 530
Computing and Information Science ............................................... 532
Co-operative Education .................................................................. 535
Crop Science .................................................................................. 536
Economics ..................................................................................... 537
Environmental Design and Rural Development ................................... 541
Engineering ................................................................................... 543
English ........................................................................................... 551
Environmental Management ........................................................... 557
Environmental Sciences ............................................................... 558
Equine ........................................................................................... 564
European Studies .......................................................................... 566
External Courses ............................................................................ 567
Financial Mathematics .................................................................... 568
Family Relations and Human Development ........................................ 569
Food, Agricultural and Resource Economics .................................... 573
Food Science ................................................................................ 575
French Studies ............................................................................... 578
Geography .................................................................................... 581
German Studies ............................................................................ 584
Greek ............................................................................................... 585
History .......................................................................................... 586
Horticultural Science ....................................................................... 593
Hospitality and Tourism Management .............................................. 595
Human Resources and Organisational Behaviour ......................... 598
Human Kinetics ............................................................................. 600
Humanities .................................................................................... 603
Indigenous ...................................................................................... 605
Interdisciplinary Physical Science .................................................... 606
Interdisciplinary Social Science ....................................................... 607
Interdisciplinary University ............................................................. 608
Integrative Biology .......................................................................... 610
International Development ............................................................ 611
Italian Studies ................................................................................ 613
Landscape Architecture .................................................................... 614
Latin ............................................................................................... 616
Linguistics ..................................................................................... 617
Management ................................................................................ 618
Marketing and Consumer Studies .................................................... 621
Mathematics ................................................................................ 623
Microbiology .................................................................................. 625
Molecular and Cellular Biology ....................................................... 627
Molecular Biology and Genetics ...................................................... 628
Music ............................................................................................. 630
Nanoscience .................................................................................. 634
Neuroscience ................................................................................ 635

last revision: July 4, 2019
Nutrition ................................................................. 636
Organic Agriculture ................................................. 638
Pathology .............................................................. 639
Pharmacology ......................................................... 640
Philosophy ............................................................ 641
Physics .................................................................. 645
Physiology ............................................................... 648
Plant Biology ............................................................ 649
Political Science ....................................................... 650
Population Medicine ................................................ 655
Preventive Medicine .................................................. 656
Psychology .............................................................. 657
Real Estate and Housing ........................................... 662
Sociology ................................................................ 663
Sociology and Anthropology ....................................... 666
Spanish .................................................................. 668
Statistics ................................................................. 670
Studio Art .................................................................. 672
Theatre Studies ......................................................... 676
Toxicology ................................................................ 679
Veterinary Medicine ................................................ 680
Women's Studies ....................................................... 683
Zoology .................................................................. 684

XIII. Diploma Programs .............................................. 686
XIV. General Information ........................................... 687
Centre for International Programs ................................ 687
Diversity and Human Rights ....................................... 687
Policy on Intellectual Property ................................... 687
Section 1: Definitions ................................................. 687
Section 2: Copyright .................................................. 687
Section 3: Inventions and Tangible Research Property .... 688
Section 4: Additional Items ......................................... 688
Section 5: Dispute Resolution ...................................... 688
Section 6: Policy Review and Procedures ..................... 688
Policy on Non-Academic Misconduct ......................... 688
Purpose and Jurisdiction .......................................... 689
University Community Values .................................. 689
Diversity .................................................................. 689
Integrity .................................................................. 689
Learning ................................................................... 689
Safety ...................................................................... 689
Interim Suspension .................................................... 689
Process - Main Campus ............................................. 689
Periodic Review Process .......................................... 690
Notification of Disclosure of Personal Information to Statistics Canada ........................................ 690
University ID Cards ................................................... 690

XV. Summary of Attendance ....................................... 691

XVI. Administration and Faculty ................................. 694
Administration and Faculty ........................................ 694
Chancellor and Chancellor Emerita ............................. 694
The Board of Governors ............................................ 694
Administrative Officers ............................................. 694
Administrative Departments ...................................... 695
Arboratum ............................................................... 695
Art Gallery of Guelph ................................................ 695
Athletics .................................................................. 695
Audit Services .......................................................... 695
Centre for Business and Student Enterprise ................. 695
Centre for International Programs .............................. 695
Campus Community Police, Emergency Services and Fire Safety ..................................................... 695
Computing and Communications Services ................... 695
Co-operative Education and Career Services ............... 695
Environmental Health and Safety ............................... 696
Financial Services .................................................... 696
Hospitality Services .................................................. 696
Human Resources ...................................................... 696
Library and Learning Commons ................................. 696
Office of Diversity and Human Rights ......................... 697
Office of Graduate and Postdoctoral Studies ................. 697
Office of Registrarial Services ..................................... 697
Office of Research .................................................... 697
Office of Student Affairs .......................................... 697
Office of Learning and Educational Support ............... 697
Physical Resources ................................................... 697
Student Housing Services ........................................ 697

Student Life .................................................................. 698
Student Wellness (Health Services, Counselling Services, Accessibility Services, Wellness Education and Promotion, Student Support Network, and Health and Performance Centre) .................................. 698
Undergraduate Academic Information Centre ............. 698
University Centre ...................................................... 698
College of Arts ........................................................ 698
Department of History .............................................. 698
Department of Philosophy ........................................ 699
School of Fine Art and Music ..................................... 699
School of Languages and Literatures .......................... 699
School of English and Theatre Studies ....................... 699
College of Biological Science .................................... 700
Department of Human Health and Nutritional Sciences .......................................................... 700
Department of Integrative Biology ............................. 700
Department of Molecular and Cellular Biology ............ 701
Gordon S. Lang School of Business and Economics .... 701
Department of Management ...................................... 701
Department of Economics and Finance ....................... 702
Department of Marketing and Consumer Studies ........ 702
School of Hospitality, Food and Tourism Management .... 702
College of Engineering and Physical Sciences ............ 702
Department of Chemistry ......................................... 702
School of Computer Science ..................................... 703
Department of Mathematics and Statistics .................. 703
Department of Physics .............................................. 703
School of Engineering .............................................. 704
College of Social and Applied Human Sciences .......... 704
Department of Family Relations and Applied Nutrition .................................................. 705
Department of Geography, Environment and Geomatics .................................................. 705
Department of Political Science ................................. 705
Department of Psychology ........................................ 705
Department of Sociology and Anthropology ................ 706
Ontario Agricultural College .................................... 706
Department of Animal Biosciences ............................. 706
Department of Food, Agricultural and Resource Economics .................................................. 707
Department of Food Science ..................................... 707
Department of Plant Agriculture ................................ 707
School of Environmental Design and Rural Development .................................................. 708
School of Environmental Sciences ............................ 708
Ontario Veterinary College .................................... 709
Department of Biomedical Sciences .......................... 709
Department of Clinical Studies .................................. 709
Department of Pathobiology ..................................... 710
Department of Population Medicine .......................... 711

Glossary .................................................................... 712

Revisions .................................................................... 715
February 6, 2019 ...................................................... 715
April 8, 2019 ........................................................... 715
May 31, 2019 .......................................................... 715
July 4, 2019 ............................................................. 715
July 19, 2019 ............................................................ 715
I. Statement of Students' Academic Responsibilities

Your success as a student depends above all on your own response to the opportunities and responsibilities that the university environment provides. The University of Guelph is committed to supporting you in your intellectual development and responding to your individual needs. To this end, a broad network of advising, counselling, and support services is provided to assist you in meeting your personal and academic goals. At the same time, we recognize that, as a student here, you are responsible for:

• knowing the University's Learning Outcomes
• familiarizing yourself with the Undergraduate Degree Regulations & Procedures (Chapter VIII) and understanding grading procedures and continuation of study regulations;
• selecting a program of study to meet both degree and specialization requirements (Chapter X--Degree Programs) and carefully reviewing the personalized Program/Academic Evaluation (available on WebAdvisor), which lists the degree requirements you have completed and those still outstanding;
• contacting your program counsellor or faculty advisor for appropriate approvals, for clarification of the University's rules and regulations, or for guidance in forming your educational goals and making academic plans. The name and location of your program counsellor (e.g. B.A. program counsellor) is listed in Chapter VII--Academic Advising. Once you have declared a specialization, a faculty advisor (e.g. psychology advisor) will be available to assist you;
• attending first class meetings, obtaining course outlines, and meeting the course requirements as specified;
• familiarizing yourself with the Schedule of Dates (Chapter III) with particular attention to deadlines;
• referring to the procedures for Academic Consideration (Chapter VIII--Undergraduate Degree Regulations & Procedures) and initiating action by consulting your program counsellor if extenuating circumstances affect your academic performance;
• understanding what constitutes Academic Misconduct (Chapter VIII--Undergraduate Degree Regulations & Procedures) and abiding by the University's policy;
• adhering to any rules of conduct including those relating to health and safety provided by an instructor or assistant, either on a course outline or in a class, laboratory or seminar;
• checking your assigned University of Guelph e-mail account regularly for important communications. This account is the primary conduit by which the University will notify you of events, deadlines, announcements concerning grades, student financial accounts and other official information.

To achieve your full potential within the University environment, you are encouraged to take advantage of the numerous extra-curricular opportunities provided by the University, balancing them with your academic commitments.
II. The University

The University of Guelph was established in 1964 when its founding colleges - the Ontario Agricultural College, the Ontario Veterinary College and Macdonald Institute - joined with a new college of arts and science. Today, the University of Guelph comprises seven colleges - College of Arts, College of Biological Science, College of Management and Economics, College of Engineering and Physical Sciences, College of Social and Applied Human Sciences, the Ontario Agricultural College, and the Ontario Veterinary College. In addition, the University has a regional campus in Ridgeway.

The University of Guelph is a research-intensive, learner-centred university. Its core value is the pursuit of truth. Its aim is to serve society and to enhance the quality of life through internationalism and collaboration.

Students may pursue more than 80 undergraduate and 45 graduate degree programs spanning the natural and physical sciences, business, social sciences and humanities. Faculty at the University of Guelph have won more prestigious 3M Fellow teaching awards than faculty at any comparably-sized university in Canada. Our students are no less accomplished: 99.3 percent of first-year students enter with an average of at least 75 percent.

A total of 18,667 students attend Guelph, consisting of 16,617 full- and part-time undergraduates and 2,050 full- and part-time graduate students. The University of Guelph is a highly residential community, with approximately 5,260 students living in campus residences. In addition, the University of Guelph-Humber serves 1,955 full- and part-time undergraduates.

With close to $150 million in annual research funding, the University of Guelph is one of the country's top research institutions. Among its researchers, Guelph numbers 25 Fellows of the Royal Society of Canada. A 12-hectare research park adjacent to the campus is home to a growing number of research-intensive industries.

An enhanced partnership reached in 1997 between the University of Guelph and the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) relocated OMAFRA employees to an 86,000-square-foot research complex adjacent to campus, and made the University responsible for Ontario's agricultural college at Ridgeway, the Horticultural Research Institute of Ontario and OMAFRA's Laboratory Services. With its enhanced partnership, its research park, Bioproducts Discovery & Development Centre and the Guelph Food Technology Centre -- an independent laboratory on campus for food processing research and product development -- the University of Guelph is the hub of a rapidly growing cluster of agri-food education, research and laboratory services in Canada.

Guelph's commitment to internationalism is reflected in several ways. Guelph attracts about 700 international students from 100 countries and maintains 61 study abroad programs (56 exchange and five semester abroad) with 27 countries. About 500 University of Guelph students study abroad each year. The University of Guelph has 60 public- and private-sector partners in 30 countries, and participates in Canadian International Development Agency projects worth a total of $16.5 million around the world. The University offers more than 200 distance degree credit courses to more than 16,000 course enrolments. Our graduates are Guelph's ambassadors to the world with more than 90,000 alumni in 145 countries.

Academic Organization

- College of Arts
- College of Biological Science
- Gordon S. Lang School of Business and Economics
- College of Engineering and Physical Sciences
- College of Social and Applied Human Sciences
- Ontario Agricultural College (including the regional campuses)
- Ontario Veterinary College
- University of Guelph-Humber

For a listing of Centres and Institutes associated with the University of Guelph, see http://www.uoguelph.ca/research/

University of Guelph-Humber

The University of Guelph-Humber is a joint venture developed by Humber College Institute of Technology and Advanced Learning and the University of Guelph. Located in Toronto on Humber College Institute of Technology and Advanced Learning's North Campus, it offers a range of academic programs leading to a university honours degree and a college diploma in four years.

For more information about the University of Guelph-Humber, see the web site at http://www.guelphhumber.ca.

Mission Statement

The University of Guelph is a research-intensive, learner-centred university. Its core value is the pursuit of truth. Its aim is to serve society and to enhance the quality of life through scholarship. Both in its research and in its teaching programs, the University is committed to a global perspective.

The University offers a wide range of excellent programs, both in theoretical and applied, disciplinary and interdisciplinary, undergraduate and graduate, in the arts, humanities, social sciences, natural sciences, as well as professional fields. Among these, it recognizes agriculture and veterinary medicine as areas of special responsibility.

The University attracts students, faculty, and staff of the highest quality. It is animated by a spirit of free and open enquiry, collaboration, and mutual respect. It asserts the fundamental equality of all human beings and is committed to creating for all members of its community, an environment that is hospitable, safe, supportive, equitable, pleasurable, and above all, intellectually challenging.

The University of Guelph is determined to put the learner at the centre of all it does, recognizing that research and teaching are intimately linked and that learning is a life-long commitment. The University eagerly promotes collaboration among undergraduates, graduate students, faculty, staff, and alumni, as well as with our local and international community, other educational institutions, government and business.

The University of Guelph is committed to the highest standards of pedagogy, to the education and well-being of the whole person, to meeting the needs of all learners in a purposefully diverse community, to the pursuit of its articulated learning objectives, to rigorous self-assessment, critical inquiry, and active learning. The University of Guelph educates students for life and work in a rapidly changing world.

The University of Guelph invites public scrutiny of the fulfillment of its mission, especially by the people of Ontario, to whom it is accountable.

University Governance

In accordance with the University of Guelph Act (1964), the University operates under a bicameral system of governance comprising the Senate and the Board of Governors. The Senate is responsible for the academic policy of the University which includes responsibility for determining the courses of study, standards of admission and qualifications for graduation. The Board of Governors is responsible for all other aspects of the governance of the University not specifically assigned to the Senate. This includes oversight of the management and control of the University and its property, revenues, expenditures, business and related affairs. The Board of Governors is responsible for the operation of the Board of Trustees of the University of Guelph Heritage Fund.

The University Secretariat carries the responsibility for coordinating and facilitating the activities of the Board of Governors and of the Senate, and their committees, subcommittees, councils, boards, and student judicial hearing and appeal committees to ensure the effective and efficient operation of the university’s bicameral system of governance.

The University Secretariat also holds responsibility for institutional compliance with the provincial Freedom of Information and Protection of Privacy Act (FIPPA); and, for providing timely, accurate, and objective information, advice, interpretation and application of policy and legislation as it relates to access to information and privacy or the University of Guelph Act (1964).

For information on the Board of Governors and the Senate, visit the University Secretariat website at http://www.uo.guelph.ca/secretariat/.
### III. Schedule of Dates

The dates for the 2019-2020 academic year are listed by semester below as follows:

- **Summer Semester 2019**
- **Fall Semester 2019**
- **Winter Semester 2020**

#### Summer Semester 2019

- **Wednesday, May 1**
  - Last day for applications for external and internal program transfer to Fall Semester 2019 for all programs except D.V.M.
- **Friday, May 3**
  - Last day to apply via hard copy to graduate at Summer 2019 Convocation (late application fee still in effect)
- **Thursday, May 9**
  - Classes commence
- **Friday, May 10**
  - Last day to submit co-op work learning goals for Summer 2019
  - Last day to submit co-op work performance evaluations for Winter Semester 2019
- **Wednesday, May 15**
  - Last day to submit co-op work reports for Winter Semester 2019
- **Friday, May 17**
  - Last day to add S19 courses
  - Last day to drop two-semester courses (W19/S19)
  - Last day for clearance to graduate for Summer 2019 Convocation
  - Last day to submit co-op learning goals for Summer Semester 2019
- **Monday, May 20**
  - Holiday--NO CLASSES SCHEDULED--classes rescheduled to Thursday, August 1
- **Friday, May 31**
  - Ridgeview Campus Convocation
  - Summer 2019 Convocation ceremonies begin
  - Deferred examinations for Winter 2019 courses commence
- **Friday, June 14**
  - Deferred examinations for Winter 2019 courses conclude
- **Saturday, June 15**
  - Summer 2019 Convocation ceremonies end
- **Monday, June 17**
  - Course selection period for Fall Semester 2019 begins
  - Check [https://www.uoguelph.ca/registrar/courseselectionwindow](https://www.uoguelph.ca/registrar/courseselectionwindow) for updates
- **Thursday, June 20**
  - Last day to apply to graduate at Fall 2019 Convocation without late application fee
- **Monday, July 1**
  - Holiday--NO CLASSES SCHEDULED--classes rescheduled to Friday, August 2
- **Friday, July 5**
  - 40th class day--Last day to drop one semester courses
  - Last day to apply online to graduate at Fall 2019 Convocation (late application fee still in effect)
- **Wednesday, July 31**
  - Last day for regularly scheduled classes
- **Thursday, August 1**
  - Classes rescheduled from Monday, May 20, Monday schedule in effect
- **Friday, August 2**
  - Classes rescheduled from Monday, July 1, Monday schedule in effect
  - Classes conclude
- **Monday, August 5**
  - Holiday
- **Thursday, August 8**
  - Examinations commence
- **Saturday, August 10**
  - Examinations scheduled
- **Friday, August 16**

#### Fall Semester 2019

- **Monday, September 2**
  - Holiday
- **Thursday, September 5**
  - Classes commence
- **Friday, September 6**
  - Last day to submit co-op learning goals reflections for Summer Semester 2019
  - Last day to apply via hard copy to graduate at Fall 2019 Convocation (late application fee still in effect)
- **Wednesday, September 11**
  - Last day to submit co-op work semester reports for Summer Semester 2019
- **Friday, September 13**
  - Last day to add F19 courses
- **Friday, September 20**
  - Last day for clearance to graduate at Fall 2019 Convocation
  - Last day to submit co-op learning goals for Fall Semester 2019
- **Monday, October 7**
  - Deferred examinations for Summer 2019 courses commence
- **Friday, October 11**
  - Deferred examinations for Summer 2019 courses conclude
- **Monday, October 14**
  - Holiday--NO CLASSES SCHEDULED -- classes rescheduled to Friday, November 29
- **Tuesday, October 15**
  - Fall Study Break Day - NO CLASSES SCHEDULED -- classes rescheduled to Thursday, November 28
  - Fall 2019 Convocation ceremonies
- **Friday, October 18**
  - Last day to apply to graduate at Winter 2020 Convocation without application late fee
- **Friday, November 1**
  - Last day to apply online to graduate at Winter 2020 Convocation (late application fee still in effect)
- **Monday, November 4**
  - Course selection period for Winter Semester 2020 begins--In-course students
- **Friday, November 15**
  - Last day for external and internal applications for admission to Winter Semester 2020 for all programs with Winter entry
- **Wednesday, November 27**
  - Last day for regularly scheduled classes
- **Thursday, November 28**
  - Classes rescheduled from Tuesday, October 15, Tuesday schedule in effect

---

**Summer Session 2019 (6 Week Format)**

- **Thursday, May 9**
  - Classes commence
- **Monday, May 13**
  - Last day to add Summer Session courses
- **Monday, May 20**
  - Holiday--NO COURSES SCHEDULED--classes rescheduled to Thursday, June 20
- **Thursday, June 6**
  - Last day to drop Summer Session courses
- **Wednesday, June 19**
  - Last day for regularly scheduled classes
- **Thursday, June 20**
  - Classes rescheduled from Monday, May 20, Monday schedule in effect
  - Classes conclude
- **Monday, June 24**
  - Summer Session 1 examinations commence
- **Friday, June 28**
  - Summer Session 1 Examinations conclude

---

**Last Revision: July 4, 2019**

[2019-2020 Undergraduate Calendar](https://www.uoguelph.ca/registrar/courseselectionwindow)
Classes rescheduled from Monday, October 14, Monday schedule in effect
Classes conclude
Last day for in-course students to apply for co-op programs that permit entry in Winter 2020

Classes conclude (Phases 1, 2, 3)

Course selection period for Summer Semester 2020 begins

Final examinations commence (Phases 1, 2, 3)
Classes resume (Phases 1, 2, 3)
Examinations conclude
Examinations commence

Externship begins (Phase 4)
Summative examinations commence (Phase 4)

Winter Break ends
Rotations begin or continue as scheduled (Phase 4)
Classes conclude
Holiday
Winter 2020 Convocation -- No Ceremony

Last day for in-course students to apply for co-op programs that permit entry in Winter 2020

Last day to submit co-op work performance evaluations for Fall Semester 2019

D.V.M. Fall Semester 2019

Monday, September 2
• Holiday--NO CLASSES SCHEDULED (Phases 1, 2, 3)
• Summer rotations with case-care responsibilities continue (Phase 4)

Tuesday, September 3
• Classes commence (Phases 1, 2, 3)
• Rotations commence (Phase 4)

Monday, October 14
• Holiday--NO CLASSES SCHEDULED (Phases 1, 2, 3)
• Rotations with case-care responsibilities continue (Phase 4)

Tuesday, October 15
• Fall Study Break Day - NO CLASSES SCHEDULED (Phases 1, 2, 3)
• Rotations begin or continue as scheduled (Phase 4)

Friday, December 20
• Rotations conclude (Phase 4)

Winter Semester 2020

Friday, January 3
• Last day to apply via hard copy to graduate at Winter 2020 Convocation (late application fee still in effect)

Monday, January 6
• Classes commence

Tuesday, January 7
• Last day to submit co-op learning goals reflections for Fall Semester 2019

Friday, January 10
• Last day to add W20 courses
• Last day to submit co-op work semester reports for Fall Semester 2019

Friday, January 17
• Last day for clearance to graduate at Winter 2020 Convocation
• Last day to submit co-op learning goals for Winter Semester 2020

Friday, January 24
• Last day to apply for international exchange and field school programs occurring in Summer Semester 2020, Fall 2020 or Winter 2021

Monday, February 3
• Deferred examinations for Fall 2019 courses commence

Friday, February 7
• Deferred examinations for Fall 2019 conclude

Friday, February 14
• Last day apply to graduate at Summer 2020 Convocation without application late fee

Monday, February 17
• Winter Break begins--NO CLASSES SCHEDULED THIS WEEK
• Holiday

Tuesday, February 18
• Winter 2020 Convocation -- No Ceremony

Friday, February 21
• Winter Break ends

Monday, February 24
• Classes resume

Monday, March 2
• Course selection period for Summer Semester 2020 begins

Friday, March 6
• Last day to apply to graduate at Summer 2020 Convocation (late application fee still in effect)

Monday, March 16
• Last day for external and internal applications for admission to Summer Semester 2020 for all programs with Summer entry

Friday, April 3
• Last day to drop W20 one semester courses and F19/W20 two semester courses
• Classes conclude
• Last day for in-course students to apply for co-op programs that permit entry in Summer 2020

Monday, April 6
• Examinations commence

Friday, April 10
• Holiday -- NO EXAMS SCHEDULED

Saturday, April 11
• NO EXAMS SCHEDULED

Monday, April 20
• Examinations conclude

Thursday, April 30
• Last day to submit co-op work performance evaluations for Winter Semester 2020

D.V.M. Winter Semester 2020

Monday, January 6
• Classes resume (Phases 1, 2, 3)
• Rotations resume (Phase 4)

Monday, February 17
• Winter Break begins--NO CLASSES SCHEDULED THIS WEEK (Phases 1, 2, 3)
• Holiday
• Rotations with case-care responsibilities continue (Phase 4)

Tuesday, February 18
• Rotations begin or continue as scheduled (Phase 4)

Friday, February 21
• Winter Break ends (Phases 1, 2, 3)

Monday, February 24
• Classes resume (Phases 1, 2, 3)

Friday, February 7
• Deferred examinations for Fall 2019 conclude

Friday, February 14
• Last day apply to graduate at Summer 2020 Convocation without application late fee

Monday, February 17
• Winter Break begins--NO CLASSES SCHEDULED THIS WEEK
• Holiday

Tuesday, February 18
• Winter 2020 Convocation -- No Ceremony

Friday, February 21
• Winter Break ends

Monday, April 6
• Laboratory evaluations commence (Phases 1, 2, 3)

Thursday, April 9
• Laboratory evaluations conclude (Phases 1, 2, 3)
• Rotations conclude (Phase 4)

Friday, April 10
• Holiday -- NO EVALUATIONS SCHEDULED

Monday, April 13
• Final examinations commence (Phases 1, 2, 3)
• Summative examinations commence (Phase 4)

Friday, April 17
• Summative examinations conclude (Phase 4)

Friday, April 24
• Final examinations conclude (Phases 1, 2, 3)

Monday, May 11
• Internship begins (Phase 4)
IV. Admission Information

Admission Requirements to University Programs

Semester One Admission

Entry Point

Admission to Semester One of a degree program and General Studies is available in the Fall semester only. A Semester One degree applicant is defined as one who will receive fewer than 2.00 transfer credits upon admission.

1. Applicants from Ontario Secondary Schools

Students seeking admission to a degree program must present the Ontario Secondary School Diploma (OSSD), or equivalent, and a minimum of six 4U/M courses including ENG4U. All specific subject requirements must be 4U/M. Specific subject requirements for admission to the various degree programs are outlined in this section. Students are also advised to consult Chapter X of the Calendar (Undergraduate Degree Programs) to note those subjects which are recommended for specific programs.

In some cases, applicants with high academic standing may be admitted if they are deficient in one of the specific subject requirements. The exceptions to this are Cooperative Education; Bachelor of Arts, Criminal Justice and Public Policy; Bachelor of Science, Bio-medical Science and Human Kinetics; Bachelor of Applied Science, Applied Human Nutrition; and the Bachelor of Commerce Program for which applicants must have completed all of the specific subject requirements.

Offers of Admission will be released starting in December. All offers of admission which are based on interim grades will be conditional upon completion of the OSSD with six 4U/M courses (or equivalent) including specific subject requirements. The minimum final admission average which the applicant will have to achieve will be stipulated in the condition. Conditions are specified in the offer letter. Grades in specific subject requirements are included in the calculation of the admission average. The University reserves the right to revoke the offer of admission should a student fail to meet any condition in the offer.

Applicants also have the opportunity to complete and submit the Student Profile Form https://admission.uoguelph.ca/spf which is considered during the third round of high school offers in May. Leadership and citizenship qualities as well as extenuating circumstances of a medical or compassionate nature are considered for applicants whose admission average falls within a discretionary range below the determined program admission average.

Students will not be required to respond to the offer until the common response date for all Ontario universities. Those wishing to respond earlier may do so.

Applicants who have not received an offer of admission by the end of May, may become eligible for admission consideration to all non-conditional enrolment programs by submitting their final grades. Admission consideration will be given on the basis of final grades only when places are still available in the program and/or specialization to which the student has applied at the time that the final grades are received. Applicants may be required to possess an admission average higher than those used prior to the end of May.

It is the applicant's responsibility to submit final, summer school or correspondence course grades to Admission Services, Level 3, University Centre, University of Guelph, Guelph, Ontario, N1G 2W1, as soon as they become available. The following methods for submission of final grades will be acceptable:

a. report card issued by the secondary school
b. certified copy of the report card
c. a transcript of marks issued by the secondary school and forwarded directly to the University.

It is suggested that students follow method c) above in order to facilitate the processing of their application. All offers based on self reported information are conditional upon receipt of the official document.

International Baccalaureate

Students applying for admission on the basis of the IB Diploma should possess a minimum score of 28. Reported bonus points may be taken into consideration. Applicants are advised that some programs will require a higher score for admission consideration. Students currently in their final year of the IB program are encouraged to present "predicted" scores on the sevenpoint scale, which will be taken into consideration to extend conditional offers of admission. The predicted scores can include grades from the Extended Essay and the Theory of Knowledge. Students must include, among their higher and standard levels, the specific subject requirements for the program to which they are applying. Specific transfer credits, where applicable, to a maximum of 2.00 credits, will be granted for grades of 5 or better on higher level courses where the applicant has been awarded the IB Diploma, Certificate or Diploma course. Students may request a change to unspecified credit on an individual basis within the first 30 days of the semester in which they commence their studies. Credit will be assigned upon receipt of official final results.

Ontario high school students registered in an IB program will automatically have their IB courses converted into Ontario U and M level equivalents. IB scores will be converted into grades on a percentage scale out of 100 by the applicant's high school. Admissions and scholarships will be determined using the conversions submitted to the Ontario Universities Application Centre by the applicant's high school.

The English Proficiency Requirement will be waived for applicants who have completed the Diploma where the language of instruction is English.

Advanced Placement

Applicants who have completed Advanced Placement exams with a minimum grade of 4 may be eligible to receive university credit to a maximum of 2.00 credits. Specific transfer credits and exemptions, where applicable, will be assigned upon receipt of official final results. Students may request a change to unspecified credit on an individual basis within the first 30 days of the semester in which they commence their studies.

2. Applicants from Outside Ontario

Applicants whose preparation to enter the University has been completed outside the Ontario secondary school system must have achieved, as a minimum requirement, academic standing equivalent to that required of Ontario students and must satisfy the subject requirements for the program desired. Students should refer to the information for Ontario applicants regarding specific subject deficiencies. The University will take into consideration the availability of specific course requirements in other countries or provinces to ensure that the applicant is not disadvantaged if particular senior secondary courses are not offered. Please refer to the information following this section regarding specific subject requirements and equivalents.

Conditional offers of admission may be released on the basis of interim and/or first term grades. Some decisions may be deferred until final grades are submitted. Applicants are encouraged to submit any academic information which might expedite an admission decision by March 1. The condition of the offer will be applied as outlined for Ontario applicants.

a. Other Provinces and Territories of Canada - Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, Prince Edward Island, Saskatchewan, Yukon--Grade 12. Quebec--Senior High School Leaving Certificate or High School Leaving Certificate plus 12 academic credits from an appropriate CEGEP program. For further details, please visit Out of Province Admission Requirements.

b. United States of America - Students must have a minimum cumulative unweighted grade point average of 3.0 from a regionally accredited high school. In addition, they must present a minimum SAT score of 1100 or ACT score of 24. GPA, SAT and ACT score admissions expectations may vary by degree and major, and are often higher than the minimum. Students should include, among their senior level courses, specific subjects that are required for admission to the degree program of their choice. Particular attention is paid to performance in program prerequisites. School profile with grading scale should be included with documents.

c. British Patterned Education Systems - Applicants must present either the GCSE (or IGCSE) and the GCE showing one of:
   i. Minimum of two Advanced level passes and three GCSE or IGCSE (Ordinary level) passes.
   ii. Two Advanced Supplementary (AS) level courses may be substituted for one Advanced level course.
   iii. Applicants who have completed GCE Advanced level examinations with a minimum grade of C may be eligible to receive a maximum of 3.00 credits (1.00 credit per course). Specific transfer credits and exemptions, where applicable, will be assigned upon receipt of official final results. Students may request a change to unspecified credit on an individual basis within the first 30 days of the semester in which they commence their studies.

d. Other Countries - The secondary school graduation certificate which admits to an internationally recognized university in another country is normally acceptable, provided that it is the equivalent of admission requirements for the University of Guelph.

NOTE: Possession of these minimum requirements does not guarantee admission. Required levels of academic preparation may vary according to the jurisdiction or country in which course work was completed. Applicants are encouraged to contact Admission Services prior to formal application in order to obtain specific information on admission requirements. They are strongly advised to provide detailed information on their particular situation.

3. Applicants for Admission as Mature Students

Statement of the Regulation

Applicants who do not possess the published minimum requirements for admission consideration may be considered for admission to degree programs as space permits and if, prior to the beginning of the Fall semester, they

a. will have been out of secondary school for at least two years.

b. will have normally not attended another post-secondary institution.

c. have completed their secondary school diploma, or equivalent.
In addition, applicants must meet specific subject requirements or equivalents, with acceptable academic standing, as outlined below for the degree programs to which they have applied. Admission as a Mature Student is available in the Fall semester only.

B.A.Sc. Program
Applied Human Nutrition - ENG4U, SBI4U, SCH4U, and one 4U math course.
Adult Development; Child, Youth and Family - ENG4U, SBI4U or SCH4U, and one 4U math course.

B.A. Program
ENG4U and two additional 4U or 4M courses, one of which must contain a writing component.

B.A.S. Program
ENG4U, MHF4U, and two of the following three courses: SBI4U, SCH4U, SPH4U.

B.B.R.M. Program
Environmental Management; Equine Management - ENG4U, SBI4U, and one additional 4U/M course. Food Industry Management - MHF4U, SBI4U and SCH4U. ENG4U is also recommended.

B.Comm. Program
HTM, PMGT: ENG4U, MHF4U, and one additional 4U/M course.
ACCT, FAB, MGMT, MEF, MKMN, REH, UND: ENG4U, MHF4U, and one additional 4U math course.

B.Comp. Program
ENG4U, MCV4U, and one additional 4U/M course.

B.ENG. Program
MHF4U, MCV4U, and two of the following three courses: SBI4U, SCH4U, SPH4U.

B.L.A. Program
ENG4U and two additional 4U or 4M courses.
Submission of the Background Information Form is also required.

B.Sc. Biological Sciences Program
MHF4U, and two of the following three courses: SBI4U, SCH4U, SPH4U. ENG4U is also recommended.

B.Sc. Physical Sciences Program
MCV4U, and two of the following three courses: SBI4U, SCH4U, SPH4U. ENG4U is also recommended.

B.Sc. (Agri.) Program
MHF4U, and two of the following three courses: SBI4U, SCH4U, SPH4U. ENG4U is also recommended.

B.Sc. (Env.) Program
MHF4U, and two of the following three courses: SBI4U, SCH4U, SPH4U. ENG4U is also recommended.

General Notes and Recommendations
The minimum average required for admission consideration will normally be that required for regular admission from secondary school. Students applying under the Mature Student Regulation must submit official transcripts of any previous post-secondary work undertaken and are encouraged to write a letter explaining their activities since their last academic semester. This academic record will be considered by the Admission Committee in reaching an admission decision.

General Studies
The objective of General Studies is to provide students who do not meet the normal University admission criteria the opportunity to take university courses before registering in a specific degree program or to take university courses for continued learning with no immediate intention of registering in a degree program. All applicants must be Canadian citizens or Permanent Residents. Applicants will normally:

a. have not previously registered at a university
b. have completed the O.S.S.D. or equivalent and
c. have been out of secondary school for a minimum of 3 years.

Applicants must submit a General Studies Profile Form in which they provide their intended study objectives, including courses and program. The University, via the General Studies Admission Committee, reserves the right to grant or deny admission to a candidate based on the appropriateness of the applicant's submissions.

Applicants to the General Studies program who wish to transfer to a degree program in the future should contact Admission Services, Office of Registrarial Services for specific internal transfer admission requirements. These requirements may vary with the degree program for which transfer is sought.

Application to General Studies in the first instance is for part-time study only and available for Fall entry point only. As such, students may take a maximum of 1.50 credits in the first semester. In special circumstances, permission to study full-time may be granted by the Program Counsellor. Normally, successful completion (minimum 60% cumulative average) of 1.50 credits is required before full-time study in General Studies can be undertaken.

Advanced Standing Admission
1. Advanced Standing Applicants from a recognized University or College in Canada

Applicants for admission to the University of Guelph transferring from an accredited university or college are normally subject to the following admission policy.

a. Applicants must have completed the Ontario Secondary School Diploma including six 4U/M courses, or equivalent, for admission to the University of Guelph prior to the commencement of the academic session for which application is made.

b. Applicants must be eligible for readmission and registration on a full-time basis at the last university or college attended in the academic session for which application is made. Applicants whose academic records at another university have rendered them ineligible to continue study at that institution will be considered for admission only when the stipulated period of rustication has expired.

c. Students registered in a preliminary year, bridging year or first year at a recognized university or junior college to which students are admitted without having completed the Ontario Secondary School Diploma or the equivalent are eligible to apply for admission to first year at this University provided that their first or preliminary year program includes subjects equivalent to those 4U or 4M courses required for admission to each program. Credit towards graduation from the University of Guelph is not normally granted for work taken in the first year of the university program which does not require completion of the Ontario Secondary School Diploma or equivalent for admission.

d. Admission of students transferring from another university or college is not automatic. All such applicants will be assessed in competition with other new applicants, taking into consideration the academic requirements and enrolment limitations which pertain at the time the application is complete. In addition, an offer of admission will not imply in any way that space will be available in the course(s) in which the applicant wishes to register.

e. The University of Guelph subscribes to the following General Policy on the Transfer of Course Credits, as adopted by the Council of Ontario Universities: Acceptance of transfer credits among Ontario universities shall be based on the recognition that, while learning experiences may differ in a variety of ways, their substance may be essentially equivalent in terms of their content and rigour. Upon admission, and insofar as possible, acceptance of transfer credit should allow for the maximum recognition of previous learning experience in passed university-level courses.

Subject to the degree and specialization to which the applicant is admitted, and to grade and program requirements, any course offered for credit by another Ontario university shall be accepted for credit when there is an essential equivalency in course content.

f. In addition, the University of Guelph supports the intent of the Pan-Canadian Protocol on the Transferability of University Credits to develop consistent, fair and efficient systems to facilitate student mobility and program completion. In consideration of the principles of the Protocol, the University of Guelph undertakes to ensure that all course work completed by transfer students in the first two years of university study in Canada (including the final year leading to a diploma of college studies (DCS) in Quebec and the transfer courses offered by community colleges in British Columbia and Alberta) are recognized and, subject to degree, grade and program requirements are credited for the purpose of granting a degree provided that:

i. the applicant is deemed admissible and has been offered admission

ii. a passing grade has been achieved in each course to be transferred and the grade is at the level that normally would be required of students at the University of Guelph and

iii. the credits earned are related to the program of study in which the transfer student will register, or the credits can be counted as electives in the program of study.

g. Candidates from non-Ontario universities or colleges applying for advanced standing may submit, with the application, detailed course descriptions, or a calendar of the institution at which they studied. The provision of such information will greatly facilitate the evaluation of previous work and the consideration of possible transfer of credits. The amount of transfer credit granted is at the discretion of the Registrar and the Dean of the College concerned.

Note: Where necessary, the grades from other universities or colleges whose marking schemes differ from those of this University shall be translated into the equivalent grades of the University of Guelph and admissibility assessed in those terms. Applicants for transfer, for whom English is a second language, must submit with their application, evidence acceptable to this University of Proficiency in English (see English Proficiency in this section of the Calendar).
h. Applicants who have been required to withdraw from the University of Guelph or
another post-secondary institution and who pass university credit courses during the
period of rustication, may be eligible for 1.00 credit provided the criteria for admission or
readmission and transfer of credit are met. If university credit courses are
successfully completed after the rustication period, transfer credit may be granted for
all courses provided the criteria for admission or readmission and transfer of credit are
met. Applicants who have been debarred for academic misconduct will not receive
credit for courses taken during the period of debarment.

i. Applicants should contact Admission Services regarding specific transfer credit.

The application of these transfer credits will vary depending on the degree and
specialization. The applicant must satisfy degree graduation requirements and residency
requirements as outlined in Chapter VIII—Undergraduate Degree Regulations and
Procedures.
Specific graduation requirements will be determined in consultation with the program
counsellor and departmental advisor.

Applicants will typically be informed of the amount of advanced standing credit granted
when they receive the offer of admission. Acceptance by the student of the offer of
admission shall imply the student's agreement to the advanced standing credit granted.

2. Applicants from Universities Outside of Canada

The amount of credit granted will be dependent upon the institution and upon the
educational system. Admission Services at the University of Guelph does not grant
advanced standing for work experience or for involvement in programs such as the World
Youth Organization. Please refer to Chapter VII Undergraduate Degree Regulations and
Procedures for information on Prior Learning Assessment.

3. Advanced Standing Applications from Recognized Community
Colleges or Other Post-Secondary Institutions

The University of Guelph will also consider the granting of advanced standing for studies
completed in certain post-secondary institutions. Included in this category are:

a. Colleges of Applied Arts and Technology, and Institutes
of Technology and Advanced Learning

Applicants from appropriate programs may be considered for admission with advanced
standing in accordance with the following policy:

i. Transfer credits are determined by the Admission Committee of the program to which
the student is admitted and where applicable, in accordance with any existing
articulation agreement or pathway. Please refer to the information at the beginning
of Chapter IV on Articulation Agreements.

ii. Transfer credits will be based on courses completed normally with a grade of 'B' or
better, where those courses are deemed appropriate to the program to which the student
is admitted at this University. A minimum overall average of B is normally required
in diploma programs for consideration of any transfer credit.

iii. Up to 10.00 credits may be granted to students transferring from a three-year diploma
program, and up to 5.00 credits may be granted to students transferring from a two-year
diploma program. The granting of additional transfer credits will be considered in
the case of graduates from a one-year post-diploma program.

iv. Should a student transfer to a different program after admission to the University of
Guelph, credits assigned upon admission may be re-evaluated where deemed appropriate
by the Admission Committee of the program.

b. Colleges of Agricultural Technology

Graduates of the two-year Associate Diploma programs or other two-year programs offered
by the Colleges of Agricultural Technology may receive a maximum of 5.00 transfer
credits upon admission to a degree program. Graduates admitted to the Bachelor of Science
in Agriculture program, Bachelor of Bio-Resource Management program, and Bachelor of
Commerce, Food and Agricultural Business program may be eligible for additional
transfer credit. A minimum overall average of 70% is required in the Associate Diploma
Program(s) for consideration of any transfer credit.

4. CEGEPS - Province of Quebec

a. Applicants who present the Diplôme des Études Collégiales may be eligible for
advanced standing, to a maximum of 5.00 credits.

b. For more specific information candidates may contact Admission Services, Office of
Registrarial Services, University of Guelph.

Advanced Standing Entry Points

All undergraduate programs consider students applying from another post-secondary
institution as advanced standing applicants to the Fall entry point. Winter and Summer
entry to select programs is available. Applicants are considered as 'Advanced Standing'
if they will receive 2.00 or more transfer credits upon admission. Applicants to the
University are requested, where possible, to indicate on the Ontario Universities'
Application Centre form their subject of primary interest. In many cases the program code
to be inserted on the application form will include the subject of primary interest. It should
be noted that an offer of admission applies to both the degree program and to the major
area of study specified in the offer.

Because enrolment in certain courses is limited by the availability of resources, the
University cannot guarantee that all students wishing to take a particular specialization
will be accommodated. Applicants wishing to enrol in courses offered in the distance
only mode for personal interest or for professional development should contact the
Centre for Open Learning and Educational Support for further information and to
obtain the appropriate application form.

Application Procedures

Current Diploma application procedures are outlined in the Diploma Program Calendar.
Applicants for part-time study are considered on the same basis as full-time applicants,
and therefore must meet the published admission requirements for the program desired.

Applicants from Ontario Currently Enrolled in Secondary School

See information on "Admission Requirements" for specific course requirements for the various programs. The OUAC 105 application should be used by all applicants who are
currently enrolled in an Ontario Secondary School as a day school student. Normally
applicants will receive an offer of admission to only one program or specialization at the
University of Guelph. Applicants who apply to more than one program at the University of
Guelph will have their highest choice program considered first. Only in the event that
a student is ineligible for admission to the highest choice program will consideration be
given to the lower choices during the final round of admission offers. Students who apply
directly to a Co-op program and who are not admitted will be considered for the regular
degree program. Applicants to the University are requested, where possible, to indicate
on the application form their subject of primary interest. In many cases, the program code
to be inserted on the form will include the subject of primary interest. It should be noted
that an offer of admission applies to both the degree program and to the major area
of study specified in the offer. Because enrolment in certain courses is limited by the
availability of resources, the University cannot guarantee that all students wishing to take
a particular specialization will be accommodated.

Applicants from Ontario Not Currently Enrolled in Secondary School

Applicants who are not currently enrolled in an Ontario secondary school as a day school
student should use the OUAC 105 application form. This includes the following types of
applicants: adult, night school, correspondence, on line learning, and those who previously
obtained the Ontario Secondary School Diploma.

Applicants who apply to more than one program at the University of Guelph will have
their highest choice program considered first. In the event that a student is ineligible for
admission to the highest choice program, consideration will be given to the lower choices
during the final round of admission offers. Students who apply directly to a Co-op program
and who are not admitted will be considered for the regular degree program.

Applicants also have the opportunity to complete and submit the Student Profile Form as
indicated in the previous section.

All Other External Students

All other students should complete an OUAC 105 application form. These applicants
would include those applying from:

a. secondary school outside Ontario
b. CEGEP
c. recognized college or university
d. College of Applied Arts and Technology, and Institutes of Technology and Advanced
Learning

In addition, students applying under the Mature Student Regulation, to General Studies,
or to Non Degree should complete the 105 form. The 105 form is available on-line at
http://www.ouac.on.ca/105/

Applying From Outside Canada

Students applying from outside Canada are strongly advised to begin the application
process six to eight months prior to the proposed entry point. Those applying for admission
to the Fall semester should have their application in to Admission Services by February
15, followed by all required documentation, no later than March 1 in order to ensure a
timely decision. Early admission consideration is possible if applications arrive by January
15 and documents by February 1. There are three application options:

1. International applicants (Non-Canadian or Non-Permanent Residents of Canada)
applying to the main campus who do not intend to apply to another university within
Ontario should complete the University of Guelph International Online Application
form. This form is available at https://admission.uoguelph.ca/intapp. All documents
should be sent directly to Admission Services.

2. Applicants who wish to apply to more than one university within Ontario or Canadians
and Permanent Residents of Canada living outside of Canada should apply via the
Ontario Universities' Application Centre. 105 application form . All documents should
be sent directly to Admission Services.

3. International applicants (Non-Canadians or Non-Permanent Residents of Canada)
may also use the Common Application found at apply.commonapp.org. Documents
may be submitted through the Common Application.
Applicants who wish to check on the status of their application or to verify that all required documentation has been received may do so by checking their WebAdvisor account. Please refer to previous sections on Applicants from Outside Ontario and Applicants from Universities Outside of Canada for general information on admission requirements. The Admission Committees, upon receipt of a completed application form and all pertinent documentation, will make specific admission assessments for individual applicants.

Applying For Internal Transfer or Readmission
University of Guelph students wishing to apply to another program within the University or for readmission should complete the Internal Transfer Application form, available at http://admission.uoguelph.ca/internal.

Amendments to the Application Form
A student who has applied via the Ontario Universities' Application Centre (OUAC) may verify their program selections and biographical information via the OUAC web site. Students wishing to revise their application should do so by accessing their on line OUAC account. If any changes are made, the University of Guelph will be notified of the applicable changes approximately 2-3 business days after OUAC receives the amendment. Although all amendments are important to the processing of each application, changes to academic program choice, residence status, last name, mailing and home addresses are of significant importance and should be reported via their OUAC account process as soon as the situation arises. Amendments must be completed by the published application deadline dates.

Students who have applied on a University of Guelph application form as opposed to an OUAC application form must notify Admission Services, in writing, of any biographical or academic status changes, using the Amendment form available online or at Admission Services.

Articulation and Pathway Agreements
Articulation and Pathway agreements are contracts between institutions of higher learning that allow students who have completed a specific program at one institution to be considered for admission and assigned advanced standing credits in a specific program or programs at another institution upon admission to the second program(s). Information about all University of Guelph Articulation and Pathways can be accessed at: admission.uoguelph.ca/articulation

Associate Diploma Programs
For information on programs offered, the requirements for admission, the procedures to be followed, course descriptions, etc., please view the current Diploma Program Calendar online at http://www.uoguelph.ca/diploma_calendar/

Communication of Admission Decisions
Admission Services will use the mailing address and/or email address supplied by the applicant to communicate decisions. Applicants using the OUAC 105 application form or the applications found on the University of Guelph website can access their admission decision via WebAdvisor (access to this online tool will be made available once the application has been received). The University will not be held responsible for decisions sent to these addresses but not received.

Applicants who are not currently in any secondary or post-secondary program can normally expect to receive an admission decision within a three to four week period following receipt of the application and all official documents by Admission Services, provided they have not applied to a limited enrolment program. Typically applicants for limited enrolment programs will be considered at the same time in competition for the spaces which are available.

Students currently enrolled in a post-secondary program will normally be required to submit all official transcripts at the conclusion of their program before a final decision regarding their admission is made. An applicant who submits an official post-secondary transcript at the conclusion of their fall semester of their current academic year may receive an early offer of admission. This offer of admission will be conditional upon successful completion of the student's current academic year and conditions specified by the Admission Committee for the degree program to which the student is admitted. Official final transcripts will be required by the University of Guelph, for Fall entry, by June 1 to confirm that the conditions of early offers of admission have been satisfied. Students will be advised via email that admission conditions have been cleared.

Admission decisions for the D.V.M. program will not be made until after the deadline date for receipt of applications and documentation.

Co-operative Education
Students will be considered for admission to semester one of the Co-operative Education program upon receipt of application and supporting academic documentation. Normally, an average of 80% is the minimum required for consideration, but higher averages may be required for admission to individual programs where the demand by qualified applicants exceeds the supply of spaces. All students, including International applicants, are encouraged to explore Co-operative Education as an option. ** Specific subject requirements for admission to the various degree programs are outlined in a following section. In some cases, applicants may be required to submit a Background Information Sheet in support of their application. If a Background Information Sheet is required, Admission Services will forward information directly to the applicant upon receipt of the application.

Applicants who are refused admission to Co-operative Education will be considered for admission to the comparable regular degree program during the third round of secondary school offers of admission in mid-May. Please refer to Co-operative Education Programs in Chapter X for further information.

** Applicants to the Hotel & Tourism Management co-op program should be aware that due to the Schedule of Studies for the program, Fall start date is required. Students beginning their studies in the Winter cannot continue in co-op.

Deadline Dates - Advanced Standing and Non-Degree Programs
While the final dates for receipt of applications are listed on the chart below, applicants are advised to submit their applications well in advance of the proposed date of enrolment. The University of Guelph cannot guarantee that applicants submitting applications or supporting documentation after the deadlines will receive admission consideration for the Fall entry point due to space limitations which may exist within programs.

Deadline Dates for Advanced Standing and Non-Degree Programs

<table>
<thead>
<tr>
<th>Program &amp; Major Fall Semester</th>
<th>Application Deadline</th>
<th>Document Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.L.A.</td>
<td>May 1</td>
<td>May 1 - B.I.F. June 1 - Transcripts</td>
</tr>
<tr>
<td>D.V.M. - 2019 (Domestic)</td>
<td>December 1</td>
<td>February 1 - B.I.F. March 1 - References March 1 - Transcripts</td>
</tr>
<tr>
<td>International D.V.M. (VMCAS applicants)</td>
<td>September 15</td>
<td>November 1, 2019</td>
</tr>
<tr>
<td>International D.V.M., direct application to the University of Guelph</td>
<td>October 1</td>
<td>November 1, 2019</td>
</tr>
<tr>
<td>All other programs and major areas of study</td>
<td>May 1</td>
<td>June 1</td>
</tr>
</tbody>
</table>

ADMISSION CONSIDERATION CANNOT BE GUARANTEED FOR APPLICATIONS AND FOR DOCUMENTS RECEIVED AFTER THE DEADLINES DUE TO SPACE LIMITATIONS WHICH MAY EXIST WITHIN PROGRAMS.

Some programs will consider applications for Winter and Summer entry. For a complete listing and applicable deadline dates, please visit https://admission.uoguelph.ca/

English Proficiency
Lectures, seminars and examinations in the University are, for the most part, conducted in English and it is essential that all students have an adequate knowledge of written and spoken English in order for them to be successful in their university studies. Applicants for admission will be required to present evidence of English proficiency if:

1. their primary or first language (meaning the language first learned as a child) is not English; and
2. they have had fewer than four years of full-time secondary or post-secondary study, demonstrating satisfactory academic progress, in an English-language school system

Francophone Canadian citizens educated in Canada will not be required to meet the English Language Proficiency Requirement. Students who have completed the International Baccalaureate diploma where English was the language of instruction will be considered as having met the English Proficiency Requirement. Students who successfully complete the Advanced Level of the English Language Certificate program at the University of Guelph will be considered as having met the English Proficiency Requirement for undergraduate studies; for more information, visit the website at: http://www.eslguelph.ca/.

The University reserves the right to deny admission to applicants who do not demonstrate satisfactory facility in English, regardless of academic qualifications.
Post-Degree and Letter of Permission

University graduates who wish to enrol in degree courses to upgrade their degree or to gain credit for admission to a graduate or other academic program should apply to a non-degree category (e.g. B.A. non-degree). Applicants must hold a degree which is recognized as equivalent to a Canadian university's undergraduate or graduate degree. A student from another university wishing to register at the University of Guelph to take courses for credit at the home university must present The Visiting Student application and a Letter of Permission from the Registrar, Dean or program supervisor of the home institution authorizing a program selection. For details please visit https://admission.uoguelph.ca/letterofpermission.

The Post-Degree and Visiting Student (LOP) categories are not normally open to applicants who do not meet University of Guelph general regulations for continuation of study outlined under Continuation of Study, Undergraduate Degree Regulations, Chapter VIII of the Undergraduate Calendar and transfer requirements.

An offer of admission to post-degree or on the basis of Letter of Permission does not imply in any way that space will be available in the course(s) in which the applicant wishes to register. Students should contact Enrolment Services about space availability in their desired courses.

A post-degree applicant who has not previously registered at the University of Guelph, should apply at the Ontario Universities’ Application Centre (OUAC) using the OUAC 105 Online Application Form using code GND. An applicant who has previously registered at the University of Guelph should apply online as a Non-Degree Readmission Student. All post-degree applicants must submit the Supplementary Information Form for Degree Holders.

Students who register in the non-degree category and who subsequently want to change to a degree status will be required to meet admission requirements for that program, and credit granted for courses taken in the non-degree category will be subject to the regulations pertaining to that program. Students should see their program counsellor for details.

Second Degrees

Students from the University of Guelph or from another university may be admitted to and graduate with a second undergraduate degree from the University of Guelph, under the following conditions:

a. Students who have graduated with their first degree must apply to the University of Guelph for admission to the second degree program. A maximum of 10.00 credits may be transferred from the initial degree program.

b. In-course University of Guelph students may apply to graduate with two degrees at the same convocation. A maximum of 10.00 credits may be transferred from the declared program to the undeclared program.

In a) and b), the course content of the second degree program must be substantially different from that of the first. A second degree is judged to be substantially different if:

- The specializations are in different subject areas as listed in Chapter XII—Course Descriptions; or
- The schedule of studies requirements are substantially different (no more than 25% overlap).

This rule is also applicable to different subject areas within the same degree program, allowing, for example, a second B.A. or B.Sc. degree to be awarded as long as the criteria are met.

Honours Equivalent

Students from the University of Guelph or another university may upgrade a degree from the general program to the honours program to obtain an Honours Equivalent recognition. Students may also upgrade a degree from the honors program by the completion of an additional specialization to qualify for the Honours Equivalent recognition. All interested students must apply for admission to the Honours Equivalent program per the application procedures outlined in this Chapter (IV - Application Procedures). All previous University of Guelph credits may be utilized toward the equivalent degree from the honors program.

To be granted an Honours Equivalent, students must satisfy the University of Guelph residence requirements. In addition, students must satisfy the conditions for graduation for the specified honours program using the Calendar that is in effect for the semester to which they have been admitted.

The students who are granted the Honours Equivalent designation do not receive a second degree parchment and do not participate in a convocation program, but have the designation shown on their transcript. Graduation standing is not assigned for the Honours Equivalent designation.

Prior Learning Assessment (PLA)

At the University of Guelph, Prior Learning Assessment (PLA) is an acceptable process for assigning credit at the undergraduate level for learning stemming from experience acquired independently of courses taken at university. PLA provides a mechanism whereby credit is given for equivalence in a university course to those students who have mastered the content of the course concerned without having taken a formal course in the subject area. Such mastery may have been acquired, for example, through work experience, independent study or from non-degree courses. In the absence of a certificate or other formal acknowledgement of competence by an appropriately accredited institution.
Students should contact Enrolment Services for application forms and further information.

**Readmission**

Previously registered University of Guelph students must apply to Admission Services for readmission under any of the conditions outlined below. In some cases, applicants may reapply for the Fall entry point only. Applicants should contact Admission Services for details if:

1. They were required to withdraw from their program for a period of two or more semesters.
2. They were suspended from the University for academic misconduct.
3. They have graduated from this University and wish to register for additional courses.
4. Since their most recent registration at the University of Guelph, they registered in a program or courses at another post-secondary institution and wish to return to the University of Guelph.
5. They have not registered at the University of Guelph for six or more consecutive semesters.
6. They are attending the University of Guelph on a Letter of Permission and wish to continue beyond the term of the letter of permission agreement.

Readmission to a program at the University of Guelph is not automatic. Students who are required to withdraw must apply for readmission to the University after completing the minimum two semesters of rustication. Students should consult sub-sections regarding appropriate admission requirements and deadline dates in this Chapter (IV—Admission Information). Applications for readmission should include a statement which outlines the basis for readmission. Criteria used for readmission may differ by academic program. Students considering readmission should consult with the appropriate admission counsellor regarding procedures and criteria for readmission to that program.

Students apply for readmission online via the Internal Transfer/Readmission application. An application fee is payable at the time the application is submitted. Refer to http://admission.uoguelph.ca for further information.

On December 19, 1995, the University Senate approved following policy for the granting of credit while on rustication:

1. Students who have been required to withdraw, and who take university credit courses during their rustication period, will be eligible for up to 1.00 credit provided they meet the criteria for readmission and the criteria for the transfer of credit. Students registered for courses through the Open Learning program are not permitted to attend courses on campus.
2. Students who take university courses after the two-semester rustication period may normally transfer all these credits provided the student meets the criteria for readmission and the criteria for the transfer of credit.
3. Students who have been suspended for academic misconduct will not receive any credit for courses taken during the suspension period.

Note: This policy applies to any university credit course taken during the rustication period.

**Right of Selection**

It should be carefully noted that possession of the minimum requirements does not in itself guarantee admission to any of the programs or specializations offered at the University of Guelph. For all programs for which the number of qualified applicants exceeds the capacity, the University reserves the right to select the quota from among the qualified applicants.

For students applying to enter the University for the first time, the decision of the Admission Committee is final and there shall be no appeal to that decision. An applicant for readmission may, under specific circumstances, appeal the decision of the Admission Committee to deny readmission. Refer to Readmission in Chapter IV—Admission Information.

Applicants are reminded that the University is a dynamic institution and that information pertaining to admission may change. It is the responsibility of the applicant to ascertain admission requirements at the time of application.

For additional admission information, visit the Admission Services website at https://admission.uoguelph.ca/

**Specific Subject Requirements and Recommendations**

**University of Guelph Programs**

Specific subject requirements for the following programs offered by the University of Guelph are listed below:

- Bachelor of Applied Science
- Bachelor of Arts
- Bachelor of Arts and Sciences
- Bachelor of Bio-Resource Management
- Bachelor of Commerce
- Bachelor of Computing
- Bachelor of Engineering
- Bachelor of Landscape Architecture
- Bachelor of Science
- Bachelor of Science in Agriculture
- Bachelor of Science in Environmental Sciences
- Doctor of Veterinary Medicine

Specific subjects are listed under the current OSS Curriculum. If an applicant has completed two courses which are deemed to be equivalent, only one will be used in calculating the admission average (e.g. OAC English and 4U English). The Non-Academic component of 4U/M co-op courses is not accepted as a contribution to admission requirements.

Out of province applicants should visit http://admission.uoguelph.ca/outoffprov for applicable subject requirements. Students applying with educational credentials obtained outside of Canada should consult http://admission.uoguelph.ca/equivalency.

**Bachelor of Applied Science--B.A.Sc.**

**Child, Youth and Family; Adult Development**

ENG4U; one course in a 4U Mathematics; SB14U or SCH4U; three additional 4U or 4M courses.

**Applied Human Nutrition**

ENG4U; one course in a 4U Mathematics; SB14U; SCH4U; two additional 4U or 4M courses.

**Recommendations and Notes:**

- Biology (SB14U) is the recommended science course for students pursuing a major in Child, Youth & Family or Adult Development

**Bachelor of Arts--B.A.**

ENG4U; five additional 4U or 4M courses.

**Recommendations and Notes:**

1. All applicants to programs in the Social Sciences are strongly encouraged to offer a course in Mathematics among the additional five courses.
2. Students planning on entering programs in Economics; Food, Agricultural and Resource Economics; Mathematical Economics; or Mathematical Science are strongly recommended to complete 4U Advanced Functions (MHF4U) prior to registering.

**Bachelor of Arts and Sciences--B.A.S.**

ENG4U; MHF4U; two 4U courses from SB14U, SCH4U or SPH4U; one 4U or 4M Arts or Social Science; one additional 4U or 4M course.

**Bachelor of Bio-Resource Management--B.B.R.M.**

Environmental Management; Equine Management - ENG4; SB14U; and four additional 4U or 4M courses. Food Industry Management – ENG4U; MHF4U; SB14U; SCH4U; and two additional 4U or 4M courses.

**Bachelor of Commerce--B.Comm.**

Accounting; Food and Agricultural Business; Management; Marketing Management; Management Economics and Finance; Real Estate and Housing and Undeclared

ENG4U; MHF 4U; one additional 4U Mathematics course, three additional 4U or 4M courses.

**Hospitality and Tourism Management; Public Management**

ENG4U; MHF 4U; four additional 4U or 4M courses.

**Bachelor of Computing--B.Comp.**

ENG4U; MCV4U; four additional 4U or 4M courses.

**Recommendations and Notes:**

1. Computing and Mathematics of Data Management courses are recommended, as are any other courses necessary to prepare the student for study in an "Area of Application".

**Bachelor of Engineering--B.Eng.**

ENG4U; MHF4U; MCV4U; two 4U courses from SB14U, SCH4U or SPH 4U; one additional 4U or 4M course.

**Recommendations and Notes:**

1. All applicants are encouraged to include both 4U Physics and Chemistry in their courses.
2. Applicants are considered on the basis of academic performance and a review of a Student Profile Form, if submitted for consideration. Differential criteria may prevail for admission to the various B.Eng. programs. Students who are admitted but lack specific required courses must complete replacement courses available at the University which do not count towards the 23.50 credits required for the B.Eng. program. Students intending to enrol in these courses should consult the timetable and Chapter XII of the Calendar to determine the semesters during which they are offered.
3. Applicants who lack one specific subject requirement but who have a high overall academic standing are encouraged to apply for admission to the regular (non-coop) program. Replacement credits are available at the University of Guelph.
4. Students selecting a major in Environmental Biological or Biomedical Engineering are advised to include Physics, Chemistry and Biology in their program of study. Students intending to major in Mechanical or Water Resources Engineering should include Physics, Chemistry and one of Biology or Computer Studies; Mechanical Engineering, Computer Engineering and Engineering Systems and Computing majors should include Physics, Chemistry and Computer Studies.

Bachelor of Landscape Architecture--B.L.A.

ENG4U: five additional 4U or 4M courses.

Recommendations and Notes:

1. Applicants are required to submit a Background Information Form. A breadth of courses in the social, physical and biological sciences as well as the arts and languages is encouraged for all applicants.

Bachelor of Science--B.Sc.

ENG4U; MHF4U or MCV4U (see note 4); two 4U courses from SBI4U, SCH4U or SPH4U; two additional 4U or 4M courses.

Recommendations and Notes:

It is highly recommended that students select one of the two additional courses bearing in mind:

1. Their eventual specialization.
2. Regulation I on Introductory Courses, Chapter IX-B.Sc. Applicants who lack one specific 4U requirement but who have a high overall academic standing are encouraged to apply for admission to the regular (non-coop) program.
3. Applicants are advised to include Biology, Chemistry and Physics among their 4U courses.
4. Applicants to the following B.Sc. majors must include MVC4U: Biological and Pharmaceutical Chemistry; Chemistry; Biological and Medical Physics; Chemical Physics; Mathematical Science; Physics; Theoretical Physics; Nanoscience; Physical Science; Environmental Geoscience and Geomatics.

Bachelor of Science in Agriculture--B.Sc. (Agr.)

ENG4U; MHF4U; two 4U courses from SBI4U, SCH4U or SPH4U, two additional 4U or 4M courses.

Recommendations and Notes:

1. To be best prepared for semester one of the program, all applicants are advised to include 4U Biology, Chemistry, and Physics.
2. Students who lack any one specific subject requirement but who have a high overall academic average are encouraged to apply for admission to the regular (non-coop) program. Students who are admitted with a deficiency in one of the secondary school requirements are encouraged to seek advice from their academic or admission counsellor. This deficiency must be resolved in the first year of the program.

Doctor of Veterinary Medicine-D.V.M.

The class size in the Doctor of Veterinary Medicine (D.V.M.) Program is limited to approximately 120 students.

Academic Requirements

For admission to the D.V.M. Program, a minimum of four full-time semesters (10.00 credits), including specific prerequisite courses:

1. Biological Sciences - 1.00 credits (2 semester courses, with recommended emphasis on Animal Biology)
2. Cell Biology - 0.50 credit (1 semester course)
3. Genetics - 0.50 credit (1 semester course)
4. Biochemistry - 0.50 credit (1 semester course)
5. Statistics - 0.50 credit (1 semester course)
6. Humanities or Social Sciences - 1.00 credit* (2 semester courses)

Applicants must complete prerequisite courses while registered on a full-time basis (e.g. University of Guelph 2.50 credits per semester, the equivalent of five half-year courses per semester).

Note: Academic requirements for applicants to the D.V.M. Program for 2019 Entry are as follows:

To be eligible to apply for September 2019 entry to the D.V.M. Program students must have completed a minimum of four full-time semesters, including all D.V.M. admission course requirements, at a recognized university before December 31, 2018. Please refer to the 2019 D.V.M. application and required document deadline dates at:

http://www.optimarketing.com/applyingtovm/Academicrequirements.asp.

*Students entering the D.V.M. Program should be able to operate across discipline boundaries recognizing the relevance of the humanities and the social sciences to their career choice. In selecting these courses from among those acceptable, the prospective veterinary student should consider topics such as ethics, logic, critical thinking, determinants of human behaviour and human social interaction.

All courses must be at university level. Applicants should consult the list of acceptable University of Guelph courses and subject areas online at http://www.ucg.ucalgca.ca/recruitment/en/index.asp. Courses need not be completed in a specialized college or faculty or in a designated Pre-Veterinary program. Students wishing to undertake their preparatory work at the University of Guelph should ask admission to the Bachelor of Science or the Bachelor of Science in Agriculture programs. Any student who has attended university and completed two years of a full-time bachelor's degree and fulfilled the DVM entry requirements can apply to the D.V.M. program at the Ontario Veterinary College.

Applications will also be considered from persons who have successfully completed a graduate program and from persons currently enrolled in a graduate program. For those persons currently enrolled, all the requirements of the program must be successfully completed by August 1st of the year of entry to the D.V.M. Program. Persons who qualify must indicate their desire to be considered in the graduate student cohort. Their application will then be removed from the undergraduate applicant pool and considered separately. Selection for interviews will be made on the basis of academic achievement including grades in acceptable prerequisite subjects (undergraduate and graduate courses), evaluation of the Background Information Form, two letters of reference from persons assessing the applicant's skills and knowledge of veterinary medicine and two letters of reference for persons familiar with the applicant's performance as a graduate student. Final selection will be based on this information and an interview. Normally a maximum of five students will be selected from this cohort each year.

Because of limitations in class size, all candidates should have an alternative career objective and course selection should be compatible with this objective.

Residence Requirements

Canadian citizens or individuals who have Permanent Resident Status of at least one year's duration are eligible to apply as domestic students if they also satisfy the Ontario residency requirement. 'Resident' in this context is interpreted to mean someone who has resided in Ontario for twelve months, exclusive of time spent in post-secondary institutions.

Selection Criteria

Since the number of applicants who satisfy the specific course requirements exceeds the number of available spaces in the D.V.M. Program, the Admissions Sub-Committee may use the following criteria to determine those who will be admitted. The members of the Sub-Committee endeavour to select those well-qualified applicants who, in their judgement, will be best able to successfully complete the veterinary medicine curriculum and who exhibit potential to become competent, responsible veterinarians dedicated to a lifetime of productive public service and continued learning. Candidates should pay attention to the selection criteria and attributes required for entry into the D.V.M. Program and use this information to guide them in preparation for application.

1. Academic Achievement and Aptitude

In view of the need to efficiently and quickly learn large amounts of factual material and to solve problems, applicants must have demonstrated achievement in the comprehension of scientific material. This will be evaluated by the scrutiny of transcripts of previous academic records. Attention will be paid to both the quality and consistency of grades in the program presented as preparation for admission, particularly for those applicants who have spent more than the minimal time in preparation. Course selections in an applicant's last two full-time semesters will be reviewed for academic coherence. For the purpose of D.V.M. admissions, a full-time semester will include at least 5 half-year courses (2.50 credits) from the acceptable list. It is expected that the level of an applicant's courses will correspond to the semester level (year) of his or her program. Please refer to information regarding acceptable courses at http://www.ucg.ucalgca.ca/recruitment/en/applyingtovm/Academicrequirements.asp.

2. Animal and Veterinary Experience

As part of the application process, candidates must demonstrate sufficient knowledge of the profession, its dimensions and the industries it serves to permit the candidate to make and defend his or her career choice. This requires the candidate to spend adequate time under the supervision of veterinarians in clinical practice situations (volunteer or paid) in order to gain hands-on experience with a range of animal species. Practice situations include, but are not limited to, large, small, mixed, avian and exotic animal clinics; thus introducing the applicant to food producing, companion, zoo and wildlife animals, or aquaculture. Other work or volunteer experience with veterinarians can include non-practice determinants of human behaviour and human social interaction. There is an expectation that candidates will be able to demonstrate for each animal or veterinary experience the role of the veterinarian, production and breeding systems, general features of housing and feeding, productivity measures and norms, marketing systems, animal behaviour relevant to restraint, feeding and reproduction, and emerging trends and issues in the industry.
3. Background Information and Referees’ Assessments

Successful candidates should have integrity, reliability, maturity and determination. It is important that professionals have excellent communication and leadership skills, and that they have a talent for effectively working with others. To assist in identification of candidates who possess these and other attributes, applicants must complete a Background Information Form, in which they will describe their academic program, work experience and extra-curricular activities. In addition, applicants will be asked to write a short essay about why they wish to study veterinary medicine. Confidential referee reports will be required from three persons qualified to give unbiased, informed, critical assessments of the applicant. A minimum of two of the three references that applicants select must be veterinarians with whom he or she has obtained animal and veterinary experience in the fulfillment of the selection criteria outlined in Section 2.

4. Interviews

Applicants may be invited to an interview. The interviews for undergraduate domestic and international applicants to the Doctor of Veterinary Medicine program follow the Multiple Mini Interview (MMI) format. Graduate cohort applicants will be interviewed individually in the traditional format. The MMI consists of a series of short, timed, structured interview stations that draws multiple samples of a candidate’s ability to think on their feet, communicate opinions and ideas, critically appraise information and demonstrate advanced thought/knowledge of the issues facing the profession. At each station candidates are presented with a scenario to which they must react and explain their interpretation of the scenario to assessors who then mark the candidate based on a scoring rubric. The non-academic skills assessed by the MMI reflect the educational goals and objectives of OVC as well as the skills identified by the veterinary profession in Ontario as being necessary for a successful career. All interviews are held at the University of Guelph (no exceptions can be made).

Additional Attributes Required for Entry into the D.V.M. Program

Applicants should be aware that a number of attributes are required for admission to the Program. In addition to those already identified above under Selection Criteria (e.g. academic achievement, academic aptitude, integrity) a number of others, some of which relate to certain University of Guelph Learning Objectives, have been identified. These are presented here to assist prospective candidates in preparing themselves for admission.

1. Literacy and Numeracy

Literacy and numeracy are the bases on which all knowledge is founded. The ability to read, write, and calculate are fundamental intellectual tools. Students entering the D.V.M. Program will be able to demonstrate literacy skills at least to the basic level as described under Literacy in the University of Guelph Learning Objectives. They will be able to assimilate and comprehend written language at a basic level, to summarize information in a coherent manner, and use appropriate language in context. Successful applicants must be able to devise a topic or concept for discussion, frame its bounds and communicate its content.

Students entering the D.V.M. Program will understand the value and principles of describing situations in numeric terms. They will be able to assimilate and comprehend numeric data and use appropriate tools to manage such information. They must be able to use skills of numeracy to check validity of information, to use and correctly interpret appropriate statistics to describe the distribution of observations in individuals and populations, and be able to perform basic tests of hypotheses (t-test, chi-square and simple regression) and interpret these correctly.

2. Communication Skills

Communication is the process of interacting with others respectfully and involves an exchange of information, feelings and values. It includes intrapersonal communication (self-understanding, self-evaluation, and reasoning) and interpersonal communication (interaction with others, relationship and self-disclosure). Through interpersonal communication, relationships are started, maintained, or destroyed. Good communication involves an understanding of self-awareness, of self-esteem, of feelings and emotions, the development of listening skills and the willingness to disclose oneself truthfully and freely. Good communication also requires an understanding of principles of language and verbal interaction, principles of non-verbal communication, and of interpersonal communication and relationships (relationship development and deterioration, improvement of interpersonal communication, conflict management, interviewing skills etc.)

Students entering the D.V.M. Program will be able to: listen respectfully and comprehend appreciatively; practice the elements of good interpersonal communication successfully; demonstrate the ability to work cooperatively; and communicate effectively by oral, written, and electronic means at the appropriate literacy level. Successful applicants will be able to recognize the non-verbal aspects of communication by considering feelings, emotions, and values as elements of communication.

3. Judgement

Students entering the D.V.M. Program will be able to use knowledge, observational and analytical skills, with due consideration of value systems, to evaluate and implement decisions. They will be able to identify and articulate their personal value system; identify ethics and standards of conduct; and identify the values and assumptions that may be operative in various contexts. They must be able to identify, critically evaluate and accept the implications and consequences of decisions, to re-evaluate decisions based on new information, and deal effectively with uncertainty. They will be able to accept that self-assessment of ethics and standards of conduct are a professional responsibility, and accept that others may have different values and assumptions and respect those differences.

4. On-Going Curiosity (self-initiated learning)

Students entering the D.V.M. Program must be able to self-initiated learning to maintain and enhance depth and breadth of understanding. They must recognize limitations of their knowledge, skills and attitudes, identify sources of ongoing learning opportunities, and demonstrate a commitment to on-going learning and self-evaluation.

5. Forms of Inquiry

Students entering the D.V.M. Program will be able to identify and articulate the strengths and weaknesses, similarities and differences of various forms of inquiry (i.e. those used by the physical scientist, the biological scientist, the social scientist and the scholar of the humanities). They will be able to describe and apply the scientific method, and articulate and evaluate personal problem-solving processes.

6. Essential Skills and Abilities

Please refer to Essential Skills and Abilities required for the Study of Veterinary Medicine at: http://www.ovc.uoguelph.ca/recruitment/en/applyingtodvm.asp

Application Procedure

Applicants currently or previously registered at the University of Guelph will use the internal application for transfer or readmission from Admission Services on-line at http://admission.uoguelph.ca/internal. All other domestic applicants, including those with dual Canadian citizenship, must apply through the Ontario Universities Application Centre http://www.ouac.on.ca/.

International applicants should apply through the Veterinary Medical College Application Service (VMCAS). For further details see http://avmc.org/vmcas/vmcas.htm. Alternatively, international applicants can apply using the University of Guelph International Application found at https://admission.uoguelph.ca/intapp .

Application Deadline Dates

For Canadian citizens or permanent residents of Canada who satisfy the Ontario residency requirement applying to the first year of the Doctor of Veterinary Medicine Program, application forms must be received no later than December 1, 2018. Please refer to deadline dates for supporting documentation, references, official transcripts and the Background Information Form at: http://www.ovc.uoguelph.ca.

The deadline for International applicants using the VMCAS application is September 15. Those applying directly to the University of Guelph are advised to apply and submit all supporting documentation by October 1.

Application Limitation

In total, only four applications for admission to the D.V.M. Program will be considered from an individual.

Requests for Deferrals

Requests for deferral of admission to the D.V.M. program will not be permitted except on approval by the Admissions Committee due to significant medical, psychological or compassionate reasons.

Rabies Immunization

A condition of admission to the D.V.M. Program is agreement to a rabies immunization program which includes blood titre evaluation. Exemption from this condition may be granted in exceptional circumstances, but the student concerned must sign a release absolving the University of further liability.

Use of Animals

Live animals may be used for teaching purposes in some courses in the Veterinary Program, and this must be accepted by students admitted to the program. All animals are protected by the Animals for Research Act of Ontario (1980), the Guidelines for the Care and Use of Experimental Animals (Canadian Council on Animal Care), and the Animal Care Policies of the University of Guelph.

University of Guelph-Humber Programs

Admission requirements for University of Guelph-Humber programs are listed at: University of Guelph-Humber
Submission of Documents

Each of the following applicable documents must be sent in support of an application. Please note that official transcripts submitted will become the property of the University of Guelph. Normally, official transcripts must be sent directly to the University by the institution issuing the document. **The applicant is responsible for ensuring that all documents are received in Admission Services by the document deadline.** No decision will be made until all documents have been received. Personal documents will be returned upon written request. Applications with incomplete documentation after the document deadline date will not receive consideration if the program is filled and closed.

1. Ontario Secondary School Diploma or equivalent Senior Matriculation Certificates, (e.g. Alberta Grade 12, G.C.E. etc.). Students currently enrolled in their final year of secondary school in Ontario are not required to submit documentation as decisions for early admission are based on interim grades reported by the secondary school.
2. Official transcripts of all academic work taken at the post-secondary level, (e.g. university, college, etc.)
3. Transcript of marks from the last secondary school attended.
4. Any other documents demonstrating academic results or ability, or explaining the level of academic performance.
5. Any supplementary information required as part of the application.

Use of Animals in Teaching

Animals are used to support the teaching in some courses. The University of Guelph is dedicated to maintaining a high level of animal care in all of its teaching programs. Regulated by the Animals for Research Act, the University is in compliance with the standards set by the Canadian Council on Animal Care. Guelph has long been a leader in the promotion of animal welfare issues, and in 1989, established the Colonel K.L. Campbell Centre for the Study of Animal Welfare, the first such centre in North America. The Centre promotes humane systems of animal management and fosters the development of alternatives in animal use in research and teaching.
V. International Study

Study Abroad Programs

University of Guelph study abroad programs consist of three types: semesters abroad exchange programs and field schools.

Semesters abroad offer a structured group experience where a Guelph faculty member accompanies students abroad. Students take Guelph courses and pay tuition to the University of Guelph.

Exchange programs offer students an opportunity to take courses at a university abroad for up to a year and get credit toward their degree at Guelph. In return, students from the host university may study at Guelph. Tuition is paid to the student's home university.

Field Schools are short-term courses taught abroad usually in May/June for 4-6 weeks. They combine academics with hands-on experiential learning "in the field," allowing students to incorporate what they are learning in class with their international location.

Participants in a University of Guelph study abroad program may qualify for a travel scholarship, see Chapter IX--Scholarships and Other Awards for details.

A variety of exchange programs exist for undergraduate students and graduate students who wish to study at an overseas institution for a period of time. Regulations about exchange programs are shown in Exchange Programs of Chapter VIII--Undergraduate Degree Regulations and Procedures. For further information on any study abroad program, visit the Centre for International Programs https://www.uoguelph.ca/cip/ or visit the Information Centre, University Centre, Level 3.

Exchange Programs

For information on these or other work or study abroad options, please see the Centre for International Programs https://www.uoguelph.ca/cip/ or visit the Information Centre, University Centre, Level 3.

To access a searchable database of exchange partners and opportunities, go to visit the CIP website https://www.uoguelph.ca/cip/ and click on the “Study Abroad Program Search” button.

Argentina
  Universidad de San Andres

Australia
  Curtin University
  Deakin University
  Edith Cowan University
  Griffith University
  James Cook University
  La Trobe University
  University of Adelaide
  University of Canberra
  University of Sydney

Brazil
  Federal de Vicosa

Austria
  Universit"at f"ur Bodenkultur Wien (BOKU)
  Management Centre Innsbruck

China
  Jiangnan University
  Jiansu University
  Changzhou University
  Nanjing Arts Institute
  Nanjing Normal University
  Nanjing University
  Nanjing University of Astronautics and Aeronautics
  Nantong University
  Soochow University
  Xi'an Jiaotong-Liverpool University
  Yangzhou University
  Southwestern University of Finance and Economics

Denmark
  University of Copenhagen

England
  Keele University
  Oxford-Brookes University
  Royal Agricultural University
  University of Essex
  University of Birmingham
  University of Exeter
  Hertfordshire University

Loughborough University
  Nottingham Trent University
  University of Southampton
  University of East Anglia

Fiji
  University of the South Pacific

Finland
  Lahti Polytechnic

France
  France Business School
  Universite Claude Bernard (Lyon 1)
  Universite Lumiere (Lyon 2)
  Universite Jean Moulin (Lyon 3)
  Ecole Centrale de Lyon
  Ecole Normale Superieure de Lyon
  INSA de Lyon
  Universite Joseph Fourier (Grenoble 1)
  Universite Pierre Mendes France (Grenoble 2)
  Universite Stendhal (Grenoble 3)
  Grenoble Institute of Technology
  Universite de Savoie (Chambery)
  Universite Jean Monnet (St. Etienne)

Germany
  University of Freiburg
  University of T"ubingen
  University of Ulm
  University of Karlsruhe
  University of Heidelberg
  University of Konstanz
  University of Mannheim
  University of Stuttgart
  University of Bremen
  University of Hohenheim

Ghana
  University of Ghana

Hong Kong
  Hong Kong Polytechnic
  Lingnan University

Iceland
  University of Iceland
  University of Akureyri
  Holar University College
  Agricultural University of Iceland

Ireland
  Dublin Institute of Technology

Italy
  University of Udine

Japan
  Kwansei Gakuin University

Malaysia
  Universiti Sains Malaysia

Malta
  University of Malta

Mexico
  Instituto Tecnologico y de Estudios Superiores de Monterrey (ITESM)
  University of Guadalajara
  Universidad Nacional Autonoma de Mexico (UNAM)

Netherlands
  Wageningen University

New Zealand
  Lincoln University

Norway
  UMB: Norwegian University of Life Sciences
V. International Study, Field Schools

Field Schools
A field school is a program that includes one or more courses that are taught off-campus. Field schools combine academics with hands-on experiential learning “in the field,” allowing students to incorporate what they are learning in class with their international location.

Depending on the program, some field schools will include a course or partial course taught before students continue in the program overseas, or will be taught entirely overseas. The overseas component of University of Guelph field schools is offered in the Summer Semester, in May-June and are typically 3-6 weeks in duration. For a list of current Field School offerings go to: https://www.uoguelph.ca/cip/guelph-students/study-abroad/field-schools

Semesters Abroad
Semester Abroad programs are formal University of Guelph semesters conducted overseas that are organized by the Centre for International Programs and a Guelph faculty member who acts as coordinator. The Semester Abroad Coordinator travels with the students overseas and arranges accommodation, field trips and courses. Students pay Guelph tuition and fees.

Semester Abroad courses are taught by the Semester Abroad Coordinator and by on-site faculty contracted by Guelph, and use the Semester Abroad location as a classroom for the courses. Semester Abroad courses are in the Arts, Humanities and Social Sciences. Students receive University of Guelph credits and grades on their transcript. Semester abroad programs are open to students from all programs. Semester Abroad offerings change from year-to-year. Go to: https://www.uoguelph.ca/cip/guelph-students/study-abroad/field-schools

India Semester
The India semester offers a unique opportunity for up to 25 students to take University of Guelph courses on site at the University of Rajasthan in Jaipur. The India semester allows students to combine academic pursuits with the exploration of the rich historical and cultural resources of one of the world's oldest civilizations.

Krakow Semester
The Guelph/Krakow semester provides the opportunity for up to 25 University of Guelph students to study on the grounds of Jagiellonian University (the alma mater of Copernicus) for the fall semester. Students, who will have completed 4 semesters with a 70% average, in all undergraduate university programs are encouraged to apply (an association with the Agricultural University in Krakow provides OAC students with a unique opportunity to learn about Polish agriculture). Courses are taught by Polish faculty in English and are accredited at either the 3000 or 4000 level. Survival Polish lessons will be provided. In addition to the experience of living in a Krakow university residence and learning formally and informally about Polish art, culture, history, political systems, etc., there are a number of trips to areas and place of interest in Poland. The semester is co-ordinated by a Guelph faculty member who may also teach a course in Krakow. More detailed information about academic requirements, bursaries, courses, etc. can be obtained from the Centre for International Programs, University Centre, Level 3.

Scotland
University of Dundee
University of Aberdeen
University of Stirling
University of Strathclyde

South Africa
National University of Singapore
University of Kwazulu-Natal

Spain
University of Alcala
University of Malaga

Sweden
Swedish University of Agricultural Sciences
Linköping University
Lund University
Malmo University

Turkey
Koc University

Wales
Abertywyth University

Latin America Semester
Organized with the University of Saskatchewan, this semester-long academic program in Guatemala offers Spanish-language training and local home stays to complement our humanities and science courses. In the future, the Latin America Semester may rotate among other countries in the region. For more information, contact Dr. Kris Inwood, Department of Economics.

London Semester
Students may take a full-time semester in Britain by going on the London Semester. While the courses offered are in Arts and/or Social Science, all students are eligible to apply. The Senate regulations governing the London semester, application forms, deadline dates, and details concerning the selection of students are available at the Centre for International Programs, University Centre, Level 3.

Nice Program
Guelph students have many opportunities to enrich their academic French studies through varied programs. They may choose to spend semesters 5 and 6 in Nice, France, with the Canadian Third Year in Nice program, sponsored in part by the University of Guelph. In this program, Guelph students take courses at the University of Nice along with regular French students. Another possibility is spending one or more semesters at a university in Quebec.

Paris Semester
Up to 25 students may take advantage of this unique semester abroad experience. Courses are taught in English and are offered in the Arts and/or the Social Sciences. All students are eligible to apply. Information, application forms and further details are available from the Centre for International Programs, University Centre, Level 3.

Shanghai Semester
The Shanghai Semester offers students the opportunity to study in one of China's most vibrant cities, a sophisticated metropolitan centre which boasts a rich culture and history. Students will take courses taught in English by faculty from East China Normal University, the University of Shanghai and other universities in Shanghai, allowing students to incorporate what they are learning in class with their international experience.

Egypt Semester
Up to 25 students are eligible to apply for the Cairo Semester. Courses are taught at the American University in Cairo in English. Information, application forms and further details are available from the Centre for International Programs, University Centre, Level 3.

India Semester
Up to 25 students may take advantage of the India Semester. Courses are taught in English and are offered in the Arts and Social Sciences. Information, application forms and further details are available from the Centre for International Programs, University Centre, Level 3.

Australia Semester
Up to 25 students may take advantage of the Australia Semester. Courses are taught in English and are offered in the Arts and Social Sciences. Information, application forms and further details are available from the Centre for International Programs, University Centre, Level 3.
VI. Schedule of Fees

All fees (tuition, compulsory fees and optional fees) for a semester are due and payable on or before the date scheduled for registration for that semester.

Provisional registration may be granted to students who make arrangements with the Associate Registrar, Student Financial Services (SFS), to defer payment of their University account. Deferred payment normally will be granted only to students who can show proof of financial assistance from Ontario Student Assistance Program (OSAP) or other awards which can be confirmed by the University and are not on hand at the commencement of classes through no fault of the student. Students should apply for OSAP two months in advance of the first class day of each semester, in order that the application can be processed in time to have funds for registration. Cancellation of registration may be exercised at the discretion of the University for failure to complete the registration payment. Registration may be cancelled for students who have not paid or made satisfactory arrangement for payment by the payment deadline announced by SFS each semester. If a student wishes to re-register, a $200.00 reinstatement fee will be charged for full-time students and a $100.00 reinstatement fee will be charged for part-time students. Reinstatement will not be allowed after October 15th for the Fall semester, February 15th for the Winter semester and June 15th for the Summer semester.

Fall Semester Only - Minimum Registration Deposit

All students are required to make the minimum, compulsory, non-refundable Registration Deposit of $200.00 prior to the beginning of the Fall semester (please refer to the Student Financial Services website Tuition & Fees Announcement). Payment of this deposit by the deadline date will ensure that the courses selected for the Fall term will be retained. There are no exemptions from the payment of this deposit irrespective of current account balance or funding to come in the future. This condition may be waived on a case by case basis under extenuating circumstances, e.g. medical or compassionate grounds with documentation.

Academic sanction may be applied to students who have not made payment, or suitable arrangements for payment, of their University account. Academic sanction will prevent one or more of the following:

a. release of semester examination results
b. release of transcripts
c. release of a degree or diploma
d. registration for a subsequent semester

Changes in Fee Schedule

The University reserves the right to make changes in the published schedule of fees and payment dates and also to assess charges, which are not included in the schedule of fees, for course material and/or transportation provided at University expense.

University Fees

Tuition Fees

The aforementioned tuition fees apply to Canadian students and those with permanent resident status. Students from outside of Canada, who do not have permanent resident status, should consult International Student Fees, in this section. For information regarding Tuition fees, for Full-time, Part-time and Audit students, visit the Student Financial Services website at: https://www.uoguelph.ca/registrar/studentfinance/.

Note: For tuition fees for the University of Guelph-Humber please check the University of Guelph-Humber website at: http://www.uoghumber.ca/.

Note: Special or Non-degree full-time students pay the same tuition fee per program as indicated by programs for regular full-time students.

International Student Fees

For information regarding Tuition fees for Full-time and Part-time international students visit the Student Financial Services website at: https://www.uoguelph.ca/registrar/studentfinance/.

Health Insurance for International Students

All international students registered at the University of Guelph are required to enrol in the University Health Insurance Plan (UHIP) - participation is compulsory. Current UHIP fees are found at Student Financial Services' website at: https://www.uoguelph.ca/registrar/studentfinance/.

Students who are studying on student visas and whose immigration status changes, or those who may be eligible for the regular tuition fees but are charged the international student fees, must present acceptable official documentation to Enrolment Services, Office of Registrarial Services. For a change of fees in a particular semester, the documentation must be presented prior to June 30 (Summer Semester), November 1 (Fall Semester), or February 1 (Winter Semester).

CATEGORIES OF STUDENTS WHO ARE EXEMPT FROM PAYING THE INTERNATIONAL STUDENT FEES

- Canadian citizens, permanent residents, or their dependents.
- Applicants for permanent residency who submit the appropriate letter.
- Diplomatic or consular officers of another country or representatives of the United Nations or its agencies who are stationed in Canada, or their dependents.
- Visitors, or their dependents, who are in Canada on an employment authorization.
- Officially recognized refugees.
- Members of foreign military forces admitted to Canada under the Visiting Forces Act, and their dependents.

The descriptions above are brief statements synthesized from the regulations of the Ministry of Training, Colleges and Universities. Final interpretation rests with the Office of Registrarial Services and documentation must be acceptable to the Office of Registrarial Services. The regulations are subject to change without notice.

Other Tuition and Incidental Fees

Co-operative Education

For information on current Co-operative Education fees, visit the Student Financial Services website at: https://www.uoguelph.ca/registrar/studentfinance/.

Exchange Program

Guelph students attending other institutions are required to pay the University of Guelph the cost of full-time tuition and compulsory fees (less the Bus Pass fee). These students are assessed a $75.00 Administration Fee. They also choose which optional fees to pay. Details about optional fees are available at: https://www.uoguelph.ca/registrar/studentfinance/fees/optional

Foreign students attending the University of Guelph are required to pay the University Health Insurance premiums (UHIP) as well as the medical insurance premium, and Bus Pass fee.

Semester Abroad Program

Students are required to pay full-time tuition plus the compulsory medical insurance premium and dental plan premium.

Senior Citizens (Canadian Citizens & Permanent Residents only)

Senior citizens, aged 65 years and over as of the first day of the month in which registration for a semester occurs, who are admitted for registration, will be exempt from the payment of the Fall registration deposit, domestic tuition, and fees (compulsory and optional), with the exception of material costs required for Fine Art and Distance Education courses. Exemption from tuition and fees precludes senior citizens from accessing the services associated with those fees, such as Bus Pass, Athletics.

Summer Semester and Summer Session

For classification purposes, any combination of Summer Semester credits (12 week) and Summer Session credits (6 week) that total 2.0 credits or more will constitute full-time enrollment and tuition and other university fees will be charged accordingly.

Other University Fees; Student Organization Fees; Program-Specific Fees

For information on other compulsory and optional fees, including university fees, student organization fees and program-specific fees, please visit the Student Financial Services website at: https://www.uoguelph.ca/registrar/studentfinance/.

Meal Plan Fees

The On-Campus Meal Plan is a mandatory meal plan for all students living in a traditional residence and optional for students living in the East Residence, the East Village Townhouses or off campus. The On-Campus Meal Plan is designed to cover both the Fall and Winter semesters. Hospitality Services offers five (5) different sizes of plans to accommodate a variety of eating habits. Each On-Campus Meal Plan is composed of 2 Plans in 1 - The Basic Plan and the Flex Plan.

The Basic Plan is used for all on-campus food purchases. These purchases are tax exempt when applicable.

The Flex Plan is used for vending machines, dining at select off-campus restaurants and delivery orders for pizza, subs and pitas. These purchases are taxable.

At the end of the Winter semester, so long as you are a University of Guelph student, Food Dollars remaining in your On-Campus Meal Plan will be transferred to the Carryover Ultra Food Plan. The transfer is subject to a $50.00 Administration fee. This carryover plan enables you to continue spending your remaining Food Dollars when you return to school, whether you live on or off campus.

Add the Textbook Plan to your Meal Plan! For the ultimate in convenience and savings you can add a $1000 Textbook Plan to any Meal Plan to be used exclusively in the University Bookstore to purchase all textbooks including used books, school supplies and U of G clothing for both the Fall and Winter semesters. Every time you make a purchase in the University Bookstore, you will be rewarded with a 10% REBATE on your total purchase - ADDED TO your FLEX Plan the next business day. Any textbook money that has not been spent at the end of the school year can be refunded upon request or it will automatically be added to the Carryover Ultra Plan.

Information on the On-Campus Meal Plan Fees is available at the Student Financial Services website http://www.uoguelph.ca/registrar/studentfinance/index.cfm/fees/index.

For those students not required to purchase and On-Campus Meal Plan, Hospitality Services provides a convenient, money saving Ultra Food Plan. A Textbook Plan can also be added to the Ultra Food Plan.

For more information on Hospitality's meal plans visit the Hospitality Services website http://www.hospitality.uoguelph.ca/mealplans.htm.
Co-operative Education
Students must see the Policy Agreement for Student Involvement in Co-operative Education for withdrawal policies. If a student withdraws on their own from co-op within the first 15 days of an Academic Semester, the student will receive a full refund of the co-op fee. Withdrawals after the 15th class day will not be eligible for a fee refund. Students who withdraw or are required to withdraw from a co-operative education program after accepting their second work term will be required to pay all remaining fees.

Dental Insurance Premium
The Dental Plan has an opt-out option. Please contact the Student Benefits office for the opt-out deadline. The fee is not refundable past the deadline.

Dropped Courses
Refunds of tuition fees for courses dropped by part-time students will be calculated at the same rates for withdrawals. The effective date for the drop action will be the date such information is reported to the Office of Registrarial Services.

Medical Insurance Premium
The Health Plan has an opt-out option. Please contact the Student Benefits Office for the opt-out deadline. The fee is not refundable past the deadline.

Session Courses
In addition to the refund schedule quoted above, there will be a flat fee levied for each session course dropped after the first week of the course. The financial penalty is approximately double the regular course rate penalty.

Residence Fee
Information on Residence Fees is available at the Student Financial Services website http://housing.uoguelph.ca/residence-fees.

A $500 deposit is required to apply for residence. For more information regarding Student Housing Services visit the Student Housing Services website http://www.housing.uoguelph.ca/page.cfm.

D.V.M. and Graduate Students in Single Student Residence
Due to the longer D.V.M. Winter semester, an increased Winter residence rate is applicable to D.V.M. students. Similarly, an increased rate is applicable to graduate students who must remain in residence after the end of the regular Winter semester. Students will be informed of the applicable dates, deadlines and charges late in the Fall semester or early in the Winter semester. A semester for residence purposes will terminate on the residence closing date indicated in the current Residence Contract. Section 6.2.H of the Residence Contract requires that students vacate their rooms within 24 hours of completion of their final examination.

Special University Fees
The following Special University Fees are charged on a user-fee basis as outlined below:

<table>
<thead>
<tr>
<th>Name of Fee and Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account Deferral Fee</td>
<td>$60.00 per occurrence</td>
</tr>
<tr>
<td>Cheque Refusal Fee</td>
<td>$60.00 per cheque in the amount of $452.00 or greater upon which payment is refused ($30.00 per cheque in the amount of less than $452.00).</td>
</tr>
<tr>
<td>Cheque Processing Fee</td>
<td>$20.00 per occurrence</td>
</tr>
<tr>
<td>Distance Education Resource Fee</td>
<td>$75.00 per D.E. course</td>
</tr>
<tr>
<td>Graduation Late Graduation Fee</td>
<td>Payable at time of submission of a late application for graduation.</td>
</tr>
<tr>
<td>Late Registration Fee</td>
<td>$60.00 per occurrence</td>
</tr>
<tr>
<td>Letter of Permission</td>
<td>$50.00</td>
</tr>
<tr>
<td>Official Transcript</td>
<td>$12.00 each copy</td>
</tr>
</tbody>
</table>

Bus Pass Fee
This fee is not refundable unless a student withdraws from the university within the first five class days of the semester. Please direct inquiries to the C.S.A. office.

Classification Changes
Refunds of tuition fees for students changing from full-time to part-time will be calculated on the difference of tuition values at the same rates for withdrawals. Refunds of compulsory fees (except Bus Pass, Dental Insurance premium and medical insurance premium) will be made in full up to and including the 15th class day of a semester. No refunds of compulsory fees will be made after the 15th class day. The effective date for classification change will be the date such change is recorded in the Student Information System. Optional fees are only refundable upon full withdrawal from all courses up to and including the 15th class day of a semester.

For more information regarding Withdrawal Refunds for Full-time, Part-time and Audit students, visit the Student Financial Services website at: https://www.uoguelph.ca/registrar/studentfinance/fees/refunds.

Cheque Refusal Fee
For each cheque upon which payment is refused by the bank on which it is drawn.

For information regarding Withdrawal Refunds for Full-time, Part-time and Audit students, visit the Student Financial Services website at: https://www.uoguelph.ca/registrar/studentfinance/fees/refunds.
<table>
<thead>
<tr>
<th>Name of Fee and Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Transfer Fee</strong></td>
<td>$40.00 per occurrence</td>
</tr>
<tr>
<td>For each applicant requesting a transfer from one degree program to another, or readmission.</td>
<td></td>
</tr>
<tr>
<td><strong>Registration Reinstatement Fee</strong></td>
<td>$200.00 per occurrence for full-time students</td>
</tr>
<tr>
<td>Registration will be cancelled for students who have not paid or made satisfactory arrangement for payment by the date announced by Student Financial Services each semester. There is a reinstatement fee levied for students wishing to register after the deadline announced by SFS each semester. Reinstatement will not be allowed after October 15th for the Fall semester, January 31st for the Winter semester and June 15th for the Summer semester.</td>
<td></td>
</tr>
<tr>
<td>$100.00 per occurrence for part-time students</td>
<td></td>
</tr>
<tr>
<td><strong>Supplemental Privilege</strong></td>
<td>$50.00 per occurrence</td>
</tr>
<tr>
<td>Notification of non-payment will result in the withholding of grades.</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** If the student pays the fee for the supplemental privilege and subsequently chooses not to write it, a refund will be made if the request is submitted in writing at least 15 days prior to the scheduled date of the supplemental to Undergraduate Programs Services, Office of Registrarial Services. *No refunds will be made for fees paid for examinations which were to be written at another university or college under the direction of the student.*
VII. Academic Advising

A university education is a complex and multi-faceted experience, which is best undertaken in a supportive and encouraging environment. As part of its dedication to student success, the University of Guelph is committed to providing high-quality academic advising, in order to assist students in the development and pursuit of academic objectives consistent with their life goals and the available opportunities at the University. The responsibility for developing educational plans and setting goals rests with the student. Academic advising contributes to this process by identifying alternatives, exploring likely outcomes, and referring students to appropriate resources.

Academic advising at Guelph is delivered by a team which includes faculty advisors, program counsellors, the Undergraduate Academic Information Centre (UAIC), the Associate Vice-President (Academic) and others. Coordinating all activity is the University’s Council on Undergraduate Academic Advising (CUAA), which has responsibility for overall advising systems direction and policy. The UAIC provides general walk-in assistance to students and, as appropriate, directs students to specialized advising resources. Each student has direct access to a Program Counsellor, who assists with degree program requirements and expectations. Students who are registered in a degree program that requires/allows for the declaration of a specialization (major, minor, area of concentration) also have direct access to Faculty Advisors. Faculty Advisors are assigned to specializations and focus on subject-related issues and advice.

These components of the academic advising system work together to achieve goals and objectives that include:

- helping students develop an educational plan and choose an appropriate course of studies to meet their academic and life objectives
- ensuring that students are aware of opportunities and resources that can assist them in achieving their educational goals
- assisting students in interpreting university policies and procedures, and applying general rules to their specific cases
- facilitating resolution of academic problems, conflicts and concerns, as appropriate
- referring students as necessary to other resource units
- collecting and disseminating information on student needs, wants, perceptions, and trends in order to enhance institutional effectiveness and adaptability

Within the system, specific roles and responsibilities are distributed as indicated below:

### Council on Undergraduate Academic Advising

The role of the Council on Undergraduate Academic Advising (CUAA) is to develop, review, discuss, and recommend to senior administration on an ongoing basis any and all advising-related strategies, policies, and processes. The CUAA is responsible for managing and directing academic advising policies at the university. The CUAA reports to, and is chaired by the Associate Vice-President (Academic). Membership includes broad representation from stakeholders across the university community including, but not limited to: program counsellors, faculty advisors, Office of Registrial Services, Coordinator of Undergraduate Curriculum, deans, chairs, Student Affairs, Open Learning and Educational Support/SCOL, undergraduate students, Centre for International Programs, and the Coordinator of the Undergraduate Academic Information Centre. The Council normally meets once per semester.

The CUAA develops strategic directions and formulates policy on advising issues, coordinates planning around academic advising issues, and serves as a permanent communication channel to help coordinate the work of the various individuals and entities engaged in academic advising activities.

### Faculty Advisers

Most undergraduate degree programs have a faculty advisor for each of their specializations. A contact list for current faculty advisors is available on the Undergraduate Academic Information Centre website at http://www.uoguelph.ca/uaic/facultyadvisors.

### Role of the Faculty Advisor

The faculty advisor has particular expertise in the program specialization (major, minor, area of concentration, area of emphasis) and the fit of that specialization within the degree program. The role of the faculty advisor is to:

- provide information about the academic requirements of the specialization, including eligibility to declare the specialization and graduation requirements
- refer to other campus services, as necessary
- communicate information about the specialization to the department and the curriculum committee, program committee, and program counsellor, and to bring forward any concerns or issues as students progress through the Schedule of Studies for the specialization
- liaise with the program counsellor for the degree program, in order to provide information about the specialization as it fits within the degree program

### Responsibilities of the Faculty Advisor

The responsibilities of the faculty advisor are to:

- be familiar with the academic requirements of the specialization, including eligibility to declare the specialization and graduation requirements
- assist students wishing to change or add specializations
- assist the student to make academic decisions
- refer students to the program counsellors, as appropriate
- offer advice about meeting the requirements of the Schedule of Study for the specialization
- be reasonably available to meet with students, as requested
- assist with graduation checks, as requested
- approve substitutions or exemptions for the specialization
- be aware of career and graduate study opportunities related to the field of study, or refer appropriately
- assist with course selection issues related to the specialization
- provide information to the department, curriculum committee, program committee, and program counsellor about issues or concerns concerning the Schedule of Studies for the specialization
- provide information and advice to the department and college, as requested, around enrolment management issues

### Program Counsellors

All undergraduate degree programs have a program counsellor. A contact list for current program counsellors is available on the Undergraduate Academic Information Centre website at http://www.uoguelph.ca/uaic/programcounsellors.

### Role of the Program Counsellor

The Program Counsellor has particular expertise in the degree program requirements and regulations, as well as the various specializations and their fit within the degree program. The Program Counsellor is also familiar with the policies and procedures that govern university practice. The role of the program counsellor is to:

- provide information about the academic requirements of the degree program, including admission requirements, Schedule of Studies requirements, Continuation of Study requirements, and graduation requirements
- refer to other campus services, as necessary
- communicate information about the degree program to the dean, chairs and directors, faculty advisors, curriculum committees, program committees (and their sub-committees); and to bring forward any concerns or issues as students progress through the Schedule of Studies for the degree program
- liaise with the faculty advisor for the specialization, in order to provide information about the degree program and the fit of the specialization within the degree program

### Responsibilities of the Program Counsellor

The responsibilities of the program counsellor are to:

- be familiar with the academic requirements of the degree program and its specializations, including admission requirements, the Schedule of Studies and Continuation of Study requirements, and graduation requirements for the degree program
- assist the student to make academic decisions and understand the implications of those decisions
- assist with course selection and enrolment management issues as related to the degree program
- explain transfer procedures and requirements
- explain appeal procedures
- assist with graduation checks
- sign program approval, as appropriate
- change student type, as appropriate
- meet with students as requested, or required
- refer to the faculty advisor, as appropriate
- uphold the academic policies of the university
- help interpret the academic policies and procedures to students, staff, and faculty
- act as a source of referral to other campus services
- be generally aware of career and graduate study opportunities related to the field of study, or refer appropriately
- work closely with the faculty advisor on any changes to the Schedule of Studies
- consult, as necessary, with other campus services
- provide relevant information to the faculty advisors, departments, dean, curriculum and program committees (and sub-committees) about student issues with the degree program
- participate at liaison events, as requested
The role of the Undergraduate Academic Information Centre (UAIC) (U.C. Level 3, North extension 56613, uaic@uoguelph.ca) is to provide general academic advising information to undergraduate students. This includes appropriate referral to the program counsellor, or faculty advisor, as well as other support services on campus.

For some students, the Centre may function as a first point of contact for information about academic issues. Peer helpers in the unit operate on an assessment and referral system - first helping the student to identify the problem or issue, and then, as necessary, referring her/him to the appropriate resource (e.g. program counselling office, faculty / specialization advisor, Career Services, Financial Services, etc.).

At the Centre, students will find general information on topics including but not limited to transfer requirements and procedures; Continuation of Study requirements; admission and graduation requirements; information about appeal process and procedures; help with interpreting the calendar; or help with different forms. Students who require more detailed information about their particular degree program requirements, or who have more specific questions may be directed to the program counselling office or to the faculty advisor, as appropriate.

UAIC is a resource for all students, with particular sensitivity to issues facing transfer (advanced standing) students, non-degree and general studies students, and "undecided"* students, including first year students or other students contemplating a change in program.

* Although most University of Guelph students declare a major upon entry, "undecided" in this context refers to students who may be declared in a major but are now not sure whether the program is the right fit for their educational, career, or life goals.

Undergraduate Students

Responsibilities of the Undergraduate Student

Undergraduate students admitted to the University are responsible for understanding and meeting certain responsibilities regarding Undergraduate Degree Regulations and Procedures, degree requirements, course requirements, Schedule of Dates, rules of conduct and accessing the University of Guelph email account. These responsibilities are described in Chapter I of the Undergraduate Calendar.

The responsibilities of undergraduate students regarding academic advising are to seek, when necessary:

- information from the Undergraduate Academic Information Centre
- advice and assistance regarding academics from the program counsellor or faculty advisor
- clarification of regulations and procedures from the program counsellor or faculty advisor

Interpretation of University Academic Regulations

A student who requires assistance in the interpretation of the academic regulations of the University or the method of their application in reference to the student's particular circumstances should consult the Undergraduate Academic Information Centre, their Program Counsellor, or one of the Associate Registrars (Office of Registrarial Services, Level 3, University Centre).

Non-Academic Counselling

Students are advised to consult the Student Wellness Services and the Student Life sub-section in Chapter XIV--General Information in this Calendar, for information on the types and locations of non-academic counselling offered by the University.

Program Approval

Students should present their Academic Evaluation Report plus any updates when seeking academic advice. Approval is required if:

1. Most students who wish to register for more than 2.75 credits prior to the last day of an add period require program counsellor approval (some degree programs are exempt from the 2.75 maximum). On the last day of an add period all students can register in up to 3.25 credits in a semester without obtaining program counsellor approval.

2. Students who wish to make a change to their specialization within their current degree program (i.e. major, minor, area of concentration) must complete an Undergraduate Schedule of Studies Change Request form. Once the form has been completed the student must obtain the signature of the program counsellor for the degree program and submit the completed form to Enrolment Services (Level 3, University Centre).


VIII. Undergraduate Degree Regulations and Procedures

General Information

Academic Consideration, Appeals and Petitions

The University of Guelph is committed to supporting students in their learning experiences and responding to their individual needs. To this end a broad network of advising, counselling, and support services is provided to assist students in meeting their personal and academic goals. The University is aware that a variety of situations or events beyond the student's control may affect academic performance. Support is provided to accommodate academic needs in the face of personal difficulties or unforeseen events. Procedures for academic appeals are designed to ensure that every effort is made at these times to provide appropriate accommodation and consideration, thus enabling students to complete course and program requirements as quickly as possible.

Process for Academic Consideration and Appeals

This chart outlines the categories for academic consideration, grounds, timelines and appeals. For detailed information on the policies and processes, see the following pages. Students are reminded to consult the program counsellor as soon as extenuating circumstances affect academic performance in order to initiate action and provide any required documentation.

Chart outlining the categories for academic consideration, grounds, timelines and appeals

<table>
<thead>
<tr>
<th>Category</th>
<th>Grounds for Consideration</th>
<th>Consideration Granted By</th>
<th>Period of Consideration</th>
<th>Subsequent Appeal To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomplete Course Work</td>
<td>Medical Psychological Compassionate</td>
<td>Instructor</td>
<td>Same semester</td>
<td>Academic Review Sub-Committee Submitted as soon as possible, not later than the end of the following semester</td>
</tr>
<tr>
<td>Request for deferred Privilege (Examination or Condition)</td>
<td>Medical Psychological Compassionate</td>
<td>Academic Review Sub-Committee (consult with program counsellor)</td>
<td>Documentation must be submitted to program counsellor within five working days of the missed examination/course work deadline</td>
<td>Petitions Committee 10 working days deadline for appeals of academic review decisions</td>
</tr>
<tr>
<td>Supplemental Privilege</td>
<td>Please see the criteria listed under the Supplemental Privileges section of the Undergraduate Calendar</td>
<td>Academic Review Sub-Committee (consult with program counsellor)</td>
<td>Documentation must be submitted within the first five class days of the subsequent semester</td>
<td>Petitions Committee 10 working days deadline for appeals of academic review decisions</td>
</tr>
<tr>
<td>Late Drops, Credit Standing, and Withdrawal with Failure (WF)</td>
<td>Medical Psychological Compassionate</td>
<td>Academic Review Sub-Committee (consult with program counsellor)</td>
<td>Documentation must be submitted within the first 20 class days of the subsequent semester</td>
<td>Petitions Committee 10 working days deadline for appeals of academic review decisions</td>
</tr>
<tr>
<td>Request for Probationary Status</td>
<td>Medical Psychological Compassionate</td>
<td>Academic Review Sub-Committee (consult with program counsellor)</td>
<td>Contact your program counselling office for request submission deadlines</td>
<td>Petitions Committee 10 working days deadline for appeals of academic review decisions</td>
</tr>
<tr>
<td>Request for Grade Reassessment</td>
<td>Calculation Error or omission</td>
<td>Instructor</td>
<td>10 class days of the following semester</td>
<td>No appeal</td>
</tr>
<tr>
<td>Request for Grade Reassessment</td>
<td>Methods and Criteria</td>
<td>Department Chair</td>
<td>10 class days of the following semester</td>
<td>Petitions Committee 10 working days after decision of chair</td>
</tr>
<tr>
<td>Request for Grade Reassessment</td>
<td>Misapplication of an Academic Regulation</td>
<td>Instructor</td>
<td>Should be initiated as soon as possible</td>
<td>First Level: Department Chair Second Level: College Dean Third Level: Provost</td>
</tr>
</tbody>
</table>

Academic Consideration

The academic regulations outlined in VIII--Undergraduate Degree Regulations and Procedures are the basic regulations for undergraduate degree programs of the University as approved by the Senate. Terminology used to describe academic regulations is defined in the Glossary. In these regulations where the consent of the dean is required, the term "dean" is interpreted to mean the person responsible for the academic program, for example dean, associate dean, director, chair of program committee, or the program counsellor in a particular degree program.

Knowledge of the procedures, early action on the student's part, timely consultation with the instructor(s) and/or program counsellor, and immediate provision of any required documentation will facilitate a prompt, co-ordinated institutional response.

Students will need to assess the extent of the difficulty they face and the possible implications on their course work. For instance, an illness which lasts one or two days resulting in a missed deadline can usually be resolved between the faculty member and the student, often without documentation. Circumstances which affect the student's ability to attend classes, write term tests or meet assignment deadlines for an extended period of time may require more formal documentation and consideration. Students are encouraged to seek documentation if the situation extends for a significant length of time. The program counsellor, who is the dean's designate, should be contacted regarding appropriate procedures and documentation.
The student feels that appropriate consideration has not been granted by the instructor, consult with the program counsellor as soon as extenuating circumstances affect academic performance, in order to initiate action, and provide any required documentation.

All available evidence, including the student’s performance during the semester, will be given careful consideration when making a decision. Procedures to follow in each case are outlined below. Questions about procedures and deadlines should be directed to the program counsellor.

Grounds for Academic Consideration

Where possible, requests for academic consideration are to be accompanied by supporting documentation. Students unsure of documentation requirements are encouraged to contact their program counsellor.

1. Medical Grounds

For academic consideration based on medical grounds a student may be asked to provide documentation for the period of the illness. The necessity for documentation will depend in part upon the length of the illness and the amount of work missed during this time. Such documentation will always be required in the event of a request for consideration beyond the grade submission deadline for the course and must be submitted to the program counsellor within five working days of the missed examination/course work deadline. If the medical situation results in missed semester work, the student should contact the instructor, presenting medical documentation where warranted. If the absence due to illness is of a duration that will affect a number of courses or completion of the semester’s work, the student must contact the program counsellor for advice and consideration.

When the absence affects final examinations or final assignments the student should go to Student Health Services or a personal physician for documentation. The student must submit their documentation to their program counsellor within five working days of the missed examination/course work deadline.

2. Psychological Grounds

For academic consideration based on psychological grounds the student may be asked to provide documentation for the period affected. The necessity for documentation will depend in part upon the length of the problem and the amount of work missed during this time. Such documentation will always be required in the event of a request for consideration beyond the grade submission deadline for the course and must be submitted to the program counsellor within five working days of the missed examination/course work deadline. The student should submit this documentation to the program counsellor who will then advise the instructor of the need for consideration. If the difficulty is of a duration that will affect a number of courses or completion of the semester’s work, the student must contact the program counsellor for advice and consideration.

3. Compassionate Grounds

Unforeseen circumstances beyond the student’s control in either his/her personal or family life may affect academic performance. The procedure to follow to request academic consideration based on compassionate grounds depends upon the severity of the circumstance and the amount of work missed. Students may wish to contact the instructor for consideration for missed work resulting from a compassionate circumstance. If the circumstance is more significant, or if the consideration sought will go beyond the grade submission deadline for the course, the student must consult with the program counsellor within five working days of the missed examination/course work deadline. Generally, work commitments will not constitute grounds for academic consideration.

Incomplete Course Work

Instructors are responsible for granting academic consideration, if applicable, for course work up to the grade submission deadline for the course. Types of consideration that may be granted by an instructor include the setting of a make-up test, re-weighting the value of course assignments, extending a deadline or allowing the resubmission of an assignment (up to the grade submission deadline for the course). Students should consult with their program counsellor for advice on an appropriate course of action if:

a. the student feels that appropriate consideration has not been granted by the instructor, or
b. if the medical, psychological or compassionate circumstance is such that it could affect overall semester performance or the ability to meet the course grade submission deadline.

Student’s Responsibilities

If due to medical, psychological or compassionate circumstances a student is unable to complete any portion of the course’s work the student should:

1. Inform the instructor-in-charge of the course in writing.
2. If the instructor requests it, supply documentation. If documentation is unavailable, consult your program counsellor.
3. Complete and submit missed work by the new deadline established by the instructor.
4. Consult with the program counsellor if circumstances warrant (see a) and b) above).

If the medical, psychological or compassionate circumstance is such that it could affect overall semester performance or the ability to meet the course grade submission deadline, the program counsellor should be consulted regarding an appropriate course of action.

Instructor’s Responsibilities

Faculty members should exercise discretion when requiring documentation, particularly when the assessment in question constitutes a small proportion of the course grade, or when alternative means for carrying out the assessment are available.

The Board of Undergraduate Studies recommends that faculty make every effort to accommodate students representing the University in extracurricular activities when there is a conflict between those activities and the requirements of the course.

If the student does not submit all of the required work by the course grade submission deadline, the instructor shall refer the situation to the Academic Review Sub-Committee. The instructor cannot grant extensions beyond the final date for submission of grades for the course.

Program Counsellor’s Responsibilities

If the student and the instructor cannot arrive at a mutually agreeable accommodation to complete course requirements prior to the course grade submission deadline, the program counsellor may act as a mediator. The program counsellor may discuss the issue with the department chair if appropriate.

In the event that medical, psychological or compassionate circumstances are affecting the student’s overall performance, the program counsellor will ensure that the student’s instructors are advised that academic consideration based on medical, psychological or compassionate grounds is warranted. In such cases the program counsellor may be of assistance in co-ordinating instructors’ responses to the request for consideration.

Academic Review

If final examinations, term assignments, projects, work term reports or other course requirements are not completed by the course grade submission deadline, academic consideration is not the responsibility of the faculty member but rather, the responsibility of the Academic Review Sub-Committee of the program in which the student is registered.

A request for academic consideration should be made to the Academic Review Sub-Committee during, or immediately after, the semester to which it refers. A request for a deferred privilege for a missed final examination or other course requirements not completed must be submitted, along with supporting documentation, to the program counsellor within five working days of the missed examination/course work deadline.

A request to change an earlier decision of the Academic Review Sub-Committee may be made only on the basis of relevant information not previously submitted. Students wishing to resubmit a “Request for Academic Consideration” form with additional supporting documentation should consult their program counsellor. Students who believe that the decision of the Academic Review Sub-Committee is inappropriate may appeal the decision to the Senate Committee on Student Petitions within 10 working days of the academic review decision (see Petitions). The Senate Committee will not normally consider any appeals submitted past this deadline.

Student’s Responsibilities

If due to medical, psychological or compassionate circumstances the student is unable to complete a final requirement of the course by the course grade submission deadline and wishes academic consideration, the student should:

1. Consult with the program counsellor for advice on the appropriate consideration that should be requested.
2. Submit a request for consideration on the “Request for Academic Consideration” form available from Enrolment Services, Office of Registration Services at https://www.augustana.ca/registrar/downloads or from their program counsellor. A request for a deferred privilege for a missed final examination or other course requirements not completed must be submitted, along with supporting documentation, to the program counsellor within five working days of the missed examination/course work deadline.

Deadlines for other type of consideration can be found in a chart under “Process for Academic Consideration and Appeals”. Students should consult with their program counsellor for meeting dates.

Instructor’s Responsibilities

In a case where a student has not completed course requirements by the course grade submission deadline, the instructor shall complete the “Incomplete Coursework Form”. If the medical or psychological evidence or compassionate reasons have been verified and accepted the Academic Review Sub-Committees use this form to determine whether a student is eligible to be considered for a deferred privilege for a missed final exam, final assignment or final piece of the graded components of the course. The instructor should include with the Incomplete Coursework Form any documentation provided to the instructor by the student in support of the academic consideration request.

A student who receives credit standing will receive credit in the course without a numerical grade. This course will not be included in the student’s overall average or specialization average.
A deferred privilege could be approval to write an examination and/or to submit an assignment(s). Deferred privileges must be completed within the semester immediately following the semester in which the exam/course work was originally missed, refer to Chapter III—Schedule of Dates. Scheduling, from the Office of Registrarial Services, will inform the student of the deadline for the deferred privilege (see Deferred Privilege). If on the basis of acceptable medical, psychological or compassionate documentation a numerical passing grade or credit standing is granted rather than a deferred privilege, the student may request the deferred privilege. The request must be submitted in writing to Enrolment Services, Office of Registrarial Services, by the end of the add period for the following semester.

Co-operative Education Program – Appeal Process

Students may be required to withdraw from the Co-op Education program for any of the following reasons:

1. Work Term and Work Preparation Related Issues
   a. The student leaves the employer without approval during the work term.
   b. The student is dismissed with just cause from a work term.
   c. The student receives an “Unacceptable” Co-op Work Performance Evaluation by the employer.
   d. The student did not complete COOP *1100 or did not receive a passing grade.

2. Academic and Work Term Schedule of Studies Related Issues
   a. The student does not follow the approved academic and work schedule including:
      b. Maintaining full-time academic status during academic semesters (minimum 2.0 credits per semester).
      c. Successfully completing the requirements for each of the approved scheduled academic semesters.
      d. Completing no more than five full-time academic semesters in their co-op program before beginning the first work term.
      d. Completing COOP *1100 in the semester scheduled.
      e. Completing a Fall, Winter and Summer work term, unless otherwise agreed to.

3. Academic Related Issues
   a. The student does not have the required minimum 70% cumulative average after full-time studies in first year, based on a minimum of 2.0 credits in each of the Fall and Winter semesters.

Appeal Process

A student who is required to withdraw from the Co-op Education program has the option to appeal. In the case where a student wishes to apply for re-admission to the program, the student must appeal the “Required to Withdraw from Co-op” decision no later than 15th class day after notification. Students cannot re-apply for admission to the Co-op Education program in subsequent terms.

1. Work Term and Work Preparation Related Appeals
   If the student is required to withdraw from the Co-op Education program on the basis of Work Term or Work Preparation related reasons and wishes to appeal this decision, the appeal must be submitted to the Co-op Appeal Committee using the Co-op Appeals Form. The form can be obtained from the Co-operative Education & Career Services Office. The decision of the Co-op Appeal Committee is final.

2. Academic and Work Term Schedule of Studies Related Appeals
   If the student is required to withdraw from the Co-op Education program because he/she has not followed the Academic and Work Term Schedule of Studies and wishes to appeal this decision, the appeal must be submitted to the Academic Review Sub-committee.

3. Academic Related Appeals
   a. If the student is required to withdraw from the Co-op Education program because he/she does not attain the 70% cumulative average required and wishes to appeal this decision, the appeal must be submitted to the Academic Review Sub-committee, according to the procedures outlined in Chapter VIII of the Undergraduate Calendar under Academic Consideration, Appeals and Petitions.
   b. If the student wishes to appeal an “Unsatisfactory” Work Report Evaluation, the appeal must be submitted according to the regulations outlined in Chapter VIII of the Undergraduate Calendar under Grade Reassessment.

Student Petitions

The Senate Standing Committee on Student Petitions is comprised of students and faculty members and is supported by a representative from the Office of Registrarial Services and the Governance & Judicial Officer.

The Committee has the jurisdiction to:

Act as an appeal body for the following decisions:
   i. a decision of an Academic Review Sub-committee (undergraduate students) denying a request for academic consideration;
   ii. a decision of the Admissions & Progress Sub-committee (graduate students) denying a request for academic consideration;
   iii. a decision denying a specific request for academic accommodation pursuant to the Senate policy on “Academic Accommodation for Students with Disabilities”;
   iv. a decision of academic misconduct, made by the appropriate dean(s)/designate(s); either the finding of academic misconduct or the penalty may be appealed;
   v. a final grade on a course based on the methods and criteria used by the instructor;
   vi. review and make decisions regarding a student request to expunge a record of academic misconduct no sooner than five years after the date of last registration;
   vii. review and make recommendations to the President in regard to a student request to expunge a record of expulsion.
   viii. review a decision of an Admissions Sub-committee, or the Admissions & Progress Sub-committee on readmission to a program, only if the basis of the appeal is procedural unfairness or bias on the part of the Admissions Sub-committee or Admissions & Progress Sub-committee.

Students must file a petition/appeal within 10 working days of the receipt of the original decision.

For more information on the student petitions/appeal process, students may contact student judicial services at the University Secretariat judicial@uoguelph.ca .

Academic Accommodation of Religious Obligations

The University acknowledges the pluralistic nature of the graduate and undergraduate communities. Accommodation will be made to students who experience a conflict between a religious obligation and scheduled tests, mid-term examinations, final examinations, or requirements to attend classes and participate in laboratories. The type of accommodation granted will vary depending on the nature, weight and timing of the work for which accommodation is sought. Accordingly, the request for alternative arrangements normally must be submitted to the instructor in charge of the course within two weeks of the distribution of the course outline. A student requiring accommodation may submit the request to the instructor directly or through his/her program counsellor. The instructor has a responsibility to provide reasonable alternative arrangements that do not put the student at an academic disadvantage. In the case of a conflict with a final examination, the instructor should reschedule the examination to another time during the examination period taking care that the new date and time does not put the student at an academic disadvantage.

In the event that a student is not satisfied with the accommodation offered by the instructor, he/she may appeal to the Department Chair, or Director of the School, who may grant alternative accommodation. A student who remains dissatisfied with the outcome of his/her request may seek the assistance from Diversity and Human Rights (DHR) to facilitate a resolution.

For a current list of major holy days, please check the following website http://www.uoguelph.ca/hr/hr/hrholidays.shtml or contact the Diversity and Human Rights (DHR).

Academic Accommodation for Students with Disabilities - Policy

1. Purpose, Scope and Definitions

The policy, Academic Accommodation of Students with Disabilities (“Policy”) is comprised of two documents: the Policy Document and this Procedures Document. This Procedures Document is intended to support the Policy Document and provides specific information on the decision making process and appeals process related to Academic Accommodations. Definitions for capitalized terms are found in the Policy Document. In the event of a discrepancy between the Policy Document and the Procedures Document, the Policy Document will apply.

1. In accordance with the University’s policies and procedures and applicable legislation including the Ontario Human Rights Code, and the Accessibility for Ontarians with Disabilities Act, the University of Guelph shall provide reasonable accommodation, short of undue hardship
2. The University promotes the full participation of students in their academic program. It is recognized that the provision of academic accommodation is a shared accountability and responsibility between the University and the student.
3. The purpose of this Policy Document is to identify the principles and responsibilities in the provision of academic accommodation for students with disabilities. This Policy does not address accommodation related to lifestyle or quality of life.
4. In the event of a discrepancy between this Policy Document and the Procedures Document, the Policy Document will apply.
5. Students studying at the University of Guelph-Humber will be subject to the policies and procedures of Humber College with regards to Academic Accommodations.
6. The following definitions shall apply in this Policy:
   “Academic Accommodation” means modification to academic policies, procedures or the educational environment that would result in equal opportunity to attain the same level of performance, or to enjoy the same level of benefits and privileges enjoyed by others, and meets the student’s Disability-related needs. Examples of Academic Accommodations available may include, but are not limited to:
1. Purpose, Scope

The policy, Academic Accommodation of Students with Disabilities (“Policy”) is comprised of two documents: the Policy Document and this Procedures Document. This Procedures Document is intended to support the Policy Document and provides specific information on the decision making process and appeals process related to Academic Accommodations. Definitions for capitalized terms are found in the Policy Document. In the event of a discrepancy between the Policy Document and the Procedures Document, the Policy Document will apply.

2. Essential Requirements and Academic Accommodation

Decisions concerning specific forms of Academic Accommodation are made with consideration to the Essential Requirements of a specific course or program in order to ensure its integrity. Registration in a course or program does not guarantee the granting of any specific form of Academic Accommodation. Students are expected to contact SAS as early as possible to discuss their accommodation needs if their choices concerning a course or program may be affected by the specific forms of Academic Accommodation granted by the University.

3. Student Accessibility Services (SAS)

Role of SAS

3.1 SAS facilitates a variety of programs and services to assist students with participating fully in University life and maximizing campus accessibility. These may include:

a. confirming whether a student has met the criteria for establishing that a Disability exists and helping to identify appropriate options for Academic Accommodations;

b. providing to a Course Instructor, Notifications as to the appropriate types of Academic Accommodation;

c. granting common forms of In-Course Academic Accommodations as described in section 5.1 below;

d. supporting and facilitating the provision of Academic Accommodations by academic departments;

e. acting as a resource for members of the University community about disability related matters that have an impact on equitable participation in academic life; and

f. assisting the student in developing strategies for managing daily activities relating to academic life in the context of their disability.

Registration

3.2 All students who require Academic Accommodation must register with SAS in accordance with this Policy including applicants who submitted information regarding a Disability as part of the Admission process. Submission of information as part of the Admission process does not satisfy registration requirements for SAS.

3.3 In order to provide Academic Accommodations in a timely fashion, students are expected to observe the following dates:

a. First year students must submit a New Student Intake Form (NSIF) by June 15 prior to commencing their program. It is also recommended that first year students participate in SAS orientation programs offered at the start of each academic year.
b. Transfer students who are admitted after June 15 or who are starting their program in either the winter or summer semester, must submit the NSIF as soon as possible after accepting an offer of admission.

c. Students who are already attending the University and are registering with SAS for the first time must submit the NSIF as soon as they are aware that a need for accommodation exists.

d. All new students and any returning students who need to meet with an advisor must normally contact SAS by the end of the first week of classes to book an appointment. If there is an immediate need for an accommodation, students are expected to make this known when booking the appointment.

e. Students who have registered with SAS in a previous semester must reactivate their status within the first 2 weeks of classes for each semester they are enrolled by following instructions on the SAS website or sent to their University email account.

3.4 Efforts will be taken to support students who delay registration with SAS. However, some options may not be available on short notice and may be deferred to a subsequent semester.

SAS Exam Centre

3.5 Students who have been approved to write Examinations in the SAS Exam Centre must normally book the appropriate date and time with SAS:

a. At least 7 days prior to a scheduled midterm examination date;

b. No later than the 40th class day for final examinations.

3.6 Where Examinations are written in the SAS Exam Centre, SAS is responsible for working with the academic unit to:

a. Identify students who will be writing in the SAS Exam Centre at least three days working days prior to the scheduled date of the Examination;

b. Arrange for copies of the Examination to be available in the SAS Exam Centre on the day before it is to be administered to the student, and returned to the department/school on the first working day following the Examination;

c. Arrange for Examinations written in the SAS Exam Centre to be administered at the same time as the rest of the class, except when alternate timing has been approved by the Course Instructor. Examples of when this may be necessary include but are not limited to when:

i. Granting additional time causes the scheduling of two Examinations to come into conflict;

ii. A Disability precludes the student from being able to write more than one Examination per day;

iii. Medication required by the student affects the student’s ability to function at particular times of day; or

iv. Examinations are scheduled outside of regularly scheduled class times and/or the SAS Exam Centre is closed.

4. Documentation Requirements

4.1 Students requesting Academic Accommodation must provide appropriate documentation to SAS in accordance with this section. The documentation must be from an appropriate Regulated Health Professional who has the authority to diagnose the particular Disability. In the absence of current documentation identified in section 4.2 below, students can request Interim Academic Accommodations.

4.2 Documentation must be current according to the following standards:

a. Learning Disabilities and ADHD must have been assessed at age 18 or older, or within the last three years;

b. All other Disabilities must be assessed within the timeframe that the student experiences a functional limitation for which an Academic Accommodation is needed; and
d. Documentation may need to be renewed as appropriate to reflect the student’s on-going need for Academic Accommodation.

4.3 Documentation must be comprehensive and provide information regarding the student’s functional limitations in a university setting. A Functional Assessment form is used for all forms of Disabilities except for Learning Disabilities (see section 4.4 below). Functional Assessment forms are available on the SAS website. All documentation must include the following minimal information:

a. A statement of the nature of the Disability (a specific diagnosis is optional but not required);

b. Information on the severity, duration and intensity of the Disability;

c. A description of functional limitations; and

d. Whether the Disability is permanent or whether it falls under the definition of a Temporary Disability.

4.4 Students with Learning Disabilities must provide documentation in the form of a psychoeducational assessment report (“Assessment”) that conforms to established standards. The Assessment must contain but is not limited to the following information:

a. The credentials and signature of the assessor, who must be a registered psychologist or psychological associate;

b. A description of the procedures used for the Assessment, including relevant contextual information;

c. Evidence that appropriate psychometric testing has been employed, including instruments that have been validated against adult norms;

d. Information about the severity of the Functional Limitations experienced by the student;

e. Ruling out of other possible explanations for the observed assessment results (differential diagnosis);

f. An indication that the results are believed to be a reasonable representation of the student’s normal abilities; and

g. Confirmation that a specific learning disability exists.

4.5 Documentation may also include recommendations as to the types of Academic Accommodations that might address a student’s specific functional limitations. However, the University retains ultimate decision-making authority as to which forms of Academic Accommodations may be granted.

5. Requests for In-Course Academic Accommodation

5.1 Subject to appropriate documentation, requests for certain common forms of In-Course Academic Accommodation can be granted directly by SAS. These include but are not limited to requests for:

a. Note taking;

b. Arrangements for appropriate seating in a classroom; or

c. Supports for Examinations that are administered by the SAS Exam Centre such as extra time, use of a private or semi-private room, use of a computer, adaptive software or word processor, or access to a reader or scribe.

5.2 Students requesting In-Course Academic Accommodation are responsible for submitting their requests in accordance with deadlines as provided on the SAS website.

5.3 Requests for In-Course Academic Accommodations not in subsection 5.1 are considered “Supplementary Academic Accommodations” and are made directly to Course Instructors or the appropriate University units with the support of SAS. Examples may include but are not limited to:

a. Audio recording of lectures;

b. Use of memory aids or calculators for Examinations;

c. Additional time for assignments, or alternate scheduling of Examinations;

d. Advanced access to information about readings and assignments; or

e. Alternative methods of assessing Essential Requirements.

5.4 SAS provides support to students in learning to negotiate on their own behalf. To that end, SAS encourages students to negotiate directly for Supplementary Academic Accommodations, when appropriate. At the student’s request, SAS may provide assistance in requesting Supplementary Academic Accommodations.

5.5 Course Instructors are encouraged to contact SAS to discuss any requested Supplementary Academic Accommodation that is not consistent with the Notification, or if there are questions related to the impact of the Supplementary Academic Accommodation on the Essential Requirements of a course or program.

5.6 If SAS supports the need to have textbooks produced in alternate format (e.g. audio books, Braille or e-text), students must make the necessary arrangements directly with Library Accessibility Services. Students are encouraged to make these arrangements early so that it can take 4 to 6 weeks to acquire alternate format text.

6. Supplementary Academic Accommodation Decision Process

6.1 If consensus on Supplementary Academic Accommodation cannot be reached between the student, the Course Instructor and SAS, then the Course Instructor shall consult as follows:

a. For undergraduate students, with the Chair or designate; or

b. For graduate students, with the Graduate Program Coordinator.

6.2 If, after the consultation described above, consensus still cannot be reached on the Supplementary Academic Accommodation to be provided, a report will be issued within 5 working days (“Report”) as follows:

a. For undergraduate students, the Chair shall provide a Report to the Dean (or designate).

b. For graduate students, the Graduate Program Coordinator shall provide a Report to both the Assistant Vice-President (Graduate Studies) and the College Dean (or designate) who has oversight responsibility for the graduate program.

6.3 The Report will include the Notification from SAS, the type(s) of Supplementary Academic Accommodation being requested, and the rationale for not granting the request including any concerns regarding its impact on the Essential Requirements of the course or program, if applicable. The Report will also include information about any Alternative forms of Supplementary Academic Accommodations that have been considered.

6.4 Within 5 working days of the receipt of the Report, the Dean (or designate) and when applicable, the A.V.P. Graduate Students shall make a decision on the type(s) of Supplementary Academic Accommodation to be granted and advise the parties in writing.

7. Appeal Process

7.1 Decisions by SAS advisors regarding the In-Course Academic Accommodations under section 5.1 may be appealed to the Manager, SAS.
7.2 Decisions by SAS regarding Supplementary Academic Accommodations it will support under Section 5.3 may be appealed to the Director, Student Wellness.

7.3 Decisions by the Dean (or designate) and when applicable, the A.V.P. Graduate Students under 6.4 may be appealed by the student to the Senate Committee on Student Petitions ("Petitions") in accordance with Petitions’ Bylaws.

Academic Load

Full-time

Courses taken via Letter of Permission are not used by the University to calculate academic load. The normal full-time semester load for academic programs is 2.50 credits except where otherwise prescribed by the schedule of studies. Under the credit system, credit weight reflects student workload rather than contact hours. Students should note that 10 to 12 hours of academic time and effort per week (including classes) are expected for a 0.50 credit course. Exceeding the normal credit load for the program can place the student at academic risk and should be carefully considered in consultation with the Program Counsellor.

Part-time

Courses taken via Letter of Permission are not used by the University to calculate academic load. A student who is registered in fewer than 2.00 credits in a semester is considered to be part-time.

Academic Misconduct

Academic misconduct is behaviour that erodes the basis of mutual trust on which scholarly exchanges commonly rest, undermines the University’s exercise of its responsibility to evaluate students’ academic achievements, or restricts the University’s ability to accomplish its learning objectives. The University takes a serious view of academic misconduct and will severely penalize students, faculty and staff who are found guilty of offences associated with misappropriation of others’ work, misrepresentation of personal performance and fraud, improper access to scholarly resources, and obstructing others in pursuit of their academic endeavours. In addition to this policy, the University has adopted a number of policies that govern such offences, including the Responsible Conduct of Research, Non-academic Misconduct, and the Policy on Non-Academic Misconduct. These policies will be strictly enforced. See Chapter I Statement of Students’ Academic Responsibilities for additional information.

It is the responsibility of the University, its faculty, students and staff to be aware of what constitutes academic misconduct and to do as much as possible through establishment and use of policies and preventive procedures to limit the likelihood of offences occurring. Furthermore, individual members of the University community have the specific responsibility of initiating appropriate action in all instances where academic misconduct is believed to have taken place. This responsibility includes reporting such offences when they occur and making one’s disapproval of such behaviour obvious. University of Guelph students have the responsibility of abiding by the University’s policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students should also be aware that if they find their academic performance affected by medical, psychological or compassionate circumstances, they should inform the appropriate individuals (instructors, program counsellors, graduate advisors) and follow the available procedures for academic consideration outlined in the University’s calendars.

Education and Remediation

Education and remediation are key to promoting an environment in which academic integrity will flourish. It should not be possible for a student to claim that he/she was not warned about the University’s academic misconduct regulations, what constitutes academic misconduct and the potential consequences of transgressing. The need to educate students about academic integrity places a particular responsibility on faculty, especially with respect to discipline-specific issues.

The University’s Strategic Directions place high value on collaboration and co-operation in the learning process, across disciplines and between institutions. Further, the strategic plan recognizes the importance of students learning to work with others in group projects and situations as key to developing skills as self-reliant learners. This is reflected in the large number of courses at this University which involve group work and encourage co-operation in completing assignments. However, there may be need to limit the amount of collaboration or co-operation. Students need to be aware of, and instructors need to be clear about assignments for which discussing or completing the work with others is not appropriate and where the expectation is that students will work separately. Instructors should be very explicit about expectations with respect to academic integrity, and information with respect to academic misconduct should be presented to students as part of the course outline, academic program orientation materials and other materials posted and distributed to students. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

In addition, in the case of examinations, students should be sure that they read and understand the regulations with respect to conduct in examinations printed on the cover of each examination booklet, and should pay particular attention to any additional instructions from the examination invigilators.

In support of remediation, students convicted of an academic offence may be required to successfully complete an academic integrity remediation process. Note: In this policy, the word “dean” means “dean or designated associate dean.” The word “chair” means “chair of a department or director of a school.” The word “department” means “department or school.”

Offences

Academic misconduct is broadly understood to mean offences against the academic integrity of the learning environment. Below are descriptions of academic offences. It is important to note that, while the University has attempted to present as comprehensive a list as possible, this list of potential academic offences should not be considered exhaustive. Students are responsible for knowing what constitutes an academic offence and faculty members have a responsibility to provide students, early in their course or program, with information about academic integrity that might be particular to their discipline. An offence may be deemed to have been committed whether the student knew a particular action was an offence or ought reasonably to have known. Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

It is the responsibility of students working in a group to take all reasonable steps to ensure that work submitted to the group by individual members has not been completed in a way that violates this policy.

Further, as some academic offences may also be viewed as violations of policies on the Responsible Conduct of Research, the Policy on Non-Academic Misconduct, the criminal code and/or civil statutes, students may also be subject to procedures and penalties outlined in those policies at the University’s discretion, and to criminal prosecution or civil action. A graduate of the University may be charged with an academic offence committed while he/she was a registered student when, in the opinion of the dean, the offense, if detected, would have resulted in a sanction sufficiently severe that the degree would not have been granted at the time that it was.

1. Misappropriation of Other’s Work

1. Plagiarism

Plagiarism is misrepresenting the ideas, expression of ideas or work of others as one’s own. It includes reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and representing these as one’s own thinking by not acknowledging the appropriate source or by the failure to use appropriate quotation marks. In addition to books, articles, papers and other written works, material may include (but is not limited to): literary compositions and phrases, performance compositions, chemical compounds, art works, laboratory reports, research results, calculations and the results of calculations, diagrams, constructions, computer reports, computer code/software, and material on the internet. Some examples of plagiarism include:

- submission of a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else;
- using direct, verbatim quotations, paraphrased material, algorithms, formulae, scientific or mathematical concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another’s data or research findings;
- buying or selling term papers or assignments;
- submitting a computer program developed in whole or in part by someone else, with or without modifications, as one’s own;
Students have the responsibility to learn and use the conventions of documentation suitable to the discipline, and are encouraged to consult with the instructor of the course, the academic supervisor, or the department chair for clarification if needed. Instructors should include in the materials they provide to students about academic integrity, information about any unique, discipline-specific understandings with respect to what must be acknowledged or cited.

2. Copying

Copying is similar to plagiarism in that it involves the appropriation of others' work as one's own. It includes copying in whole or in part another's test or examination answer(s), laboratory report, essay, or other assignment.

Copying also includes submitting the same work, research or assignment for credit on more than one occasion in two or more courses, or in the same course, without the prior written permission of the instructor(s) in all courses involved (including courses taken at other post-secondary institutions).

3. Unauthorized Co-operation or Collaboration

It is an offence to co-operate or collaborate in the completion of an academic assignment, in whole or in part, when the instructor has indicated that the assignment is to be completed on an individual basis.

In addition to being concerned about appropriate citation, students who wish to use the work of others, from any source, should be aware of copyright laws and other conventions governing intellectual property. See the Office of Research website, http://www.uoguelph.ca/research/, for links to the University's intellectual property policies.

2. Misrepresentation and Fraud

This category of offences covers a range of unacceptable activities, including the following:

1. Impersonation

Impersonation involves having someone impersonate oneself, either in person or electronically, in class, in an examination or in connection with any type of academic requirement, course assignment or material, or, of availing oneself of the results of such impersonation. Both the impersonator and the individual impersonated (if aware of the impersonation) are subject to disciplinary proceedings under this policy.

2. Falsification

It is an offence to submit or present false or fraudulent assignments, research, credentials, or other documents for any academic purpose. This includes, but is not limited to:

- falsified research or lab results and data;
- concocting facts or reference;
- false medical or compassionate certificates;
- false letters of support or other letters of reference;
- falsified academic records, transcripts or other registrarial records;
- fraudulent submission practices (e.g., altering date stamps);
- altering graded work for re-submission.

It is also falsification to misrepresent the amount of work an individual has contributed to a group assignment or activity. Both the individual to whom work is falsely attributed and those who acquiesce in its attribution commit an academic offence.

3. Withholding

It is an offence to withhold records, transcripts or other academic documents with the intent to mislead or gain unfair academic advantage.

4. Unauthorized Aids and Assistance

It is an offence to use or possess an unauthorized aid, to use or obtain unauthorized assistance, or to use or obtain prohibited material in any academic examination or term test or in connection with any other form of academic work. Such aids or material may include, but are not limited to, specific documents, electronic equipment or devices, and commercial services (such as writing, editorial, software, or research survey services). Students should assume that any such aid is prohibited unless they are specifically advised otherwise by the instructor or invigilator. Note that unauthorized assistance does not include student support services offered by the University, such as the Learning Commons.

3. Improper Access and Obstruction

1. Preventing Access to Materials

It is an offence to alter, destroy, hide, remove without authorization, or in any other way improperly restrict access to library, electronic or other materials intended for general academic use.

2. Obstruction and Interference

It is an offence to obstruct or otherwise interfere with the scholarly activities of another, or to alter or falsify the work of others, in order to gain unfair academic advantage. This includes, but is not limited to, deleting data or files, interfering or tampering with experimental data, with a human or animal subject, with a written or other creation (for example, a painting, a sculpture, a film), with a chemical used for research, or with any other object of study or research device.

4. Improper Dissemination

It is an offence to publish, disseminate or otherwise make public to a third party without prior written consent, confidential information. Confidential information includes but is not limited to academic information, data or documents which are not otherwise publicly available and which have been gathered or held with a reasonable expectation of confidentiality.

4. Aiding and Abetting

Knowingly aiding or abetting anyone in committing any form of academic misconduct is itself academic misconduct and subject to this policy.

Penalties

A. Range of Penalties That May be Assessed

If a student is found guilty of academic misconduct, an Official Warning will be given that an offence is now noted in the student’s record and that a subsequent offence will attract a more severe penalty. In addition, one or more of the following penalties may be assessed:

1. A requirement for submission of a new or alternative piece of work.
2. The rescinding of University-funded scholarships or bursaries.
3. Partial or total loss of marks on the examination or assignment in which the offence occurred.
4. Partial or total loss of marks for the course in which the offence occurred.
5. Suspension from the University for a period of between one and six consecutive semesters. For the period of suspension, a student will not be permitted to register and will retain none of the privileges accorded to students with respect to right of access to University faculty, staff, facilities or services.
6. A recommendation for expulsion from the University.
7. A recommendation for revocation/rescinding of a degree. A person who is found guilty of academic misconduct after having been approved for graduation, or after having a degree conferred, may have the degree rescinded or revoked when, in the opinion of the dean, the offence, if detected, would have resulted in a sanction sufficiently severe that the degree would not have been granted at the time that it was.

B. Notes with Respect to Penalties

The following should be noted with respect to penalties:

1. Senate has approved a set of Guidelines for the Assessment of Penalties for Academic Misconduct. These guidelines are used by chairs/directors and deans to assist them in determining appropriate penalties for individual cases. A copy of the guidelines can be found within this chapter under Penalties, or may be obtained from the Senate Office or the office of any chair or dean.
2. Students who have been found guilty of a course-based offence and who have been assessed a penalty in addition to an Official Warning will not be permitted to drop the course or to withdraw with failure. A student who has dropped the course prior to the offence(s) being detected will have his/her enrolment in the course reinstated if found guilty and if the penalty assessed is other than an Official Warning.
3. Students who have been suspended for academic misconduct will not receive credit for any courses taken while under suspension. This policy applies to any credit course taken during the suspension period, be it distance, or non-campus, taken in open learning programs at the University of Guelph or at another post-secondary institution. In addition, in the case of graduate students, any research or writing completed during the suspension period may not be submitted in fulfillment of program requirements until the period of suspension is concluded.
4. A student who wishes to be considered for readmission after a suspension must make an application that will be judged on the basis of eligibility to continue. A student who is suspended for academic misconduct and also fails to meet the continuation of study requirement will normally be required to serve the associated penalties consecutively.
5. A student who has been expelled from the University of Guelph is not eligible for readmission to the University for at least five years. A student who wishes to be considered for readmission must petition the President to have the expulsion status removed. The President will form a hearing committee to review the case for lifting the admission restriction. If the committee decides to remove the expulsion status, the student who wishes to be considered for readmission must then make an application that will be judged on the basis of eligibility to continue. If the committee decides to leave the expulsion status in place, the student must wait at least another two years before submitting a new petition.
6. Penalties may be applied retroactively if an offence is discovered subsequent to completion of a course or after graduation.

Last Revision: July 4, 2019
The responsibility for detecting academic misconduct in the context of an academic environment that is not part of the formal examination or assignment process rests with the entire University community. Where academic misconduct is suspected, but where it is unclear whether it is directly related to a specific course, or where the specific course is unknown, those with knowledge of an offence should contact the dean of the college in which the student is enrolled and the Dean of Graduate Studies in the case of a graduate student. If the suspected offence appears to be related to a specific course, then the instructor of the course should be contacted.

C. Investigation and Judgment

1. Offences Related to Course Work, Research, Thesis Work or Examinations
   a. When an instructor or an advisor suspects that an academic offence has been committed, he/she is responsible for gathering evidence to support or allay the suspicion and may invite the student to meet with him/her to discuss the concerns. The instructor/advisor should pursue the gathering of evidence in a timely way. The normal expectation for assignments due within the semester is that instructors/advisors will complete their evidence gathering within ten working days of the due date for the assignment. For assignments submitted at the end of the semester or during the examination period, the instructor has until the tenth day of the subsequent semester to collect the evidence and determine whether to pursue a case. In a case where an instructor/advisor requires substantial additional time to collect and review the evidence, he/she may seek an extension of time from the chair.
   b. If after reviewing the available evidence the instructor/advisor believes an offence may have been committed, he/she shall refer the case to the chair of the department responsible for the course or graduate program. The referral document will include all evidentiary material collected by the instructor/advisor along with the transmittal form on which the instructor/advisor may include a recommendation with respect to penalty should the allegation be upheld. A copy of the first page of the transmittal form shall be sent to Enrolment Services/Office of Graduate Studies by the chair.
   c. If the chair believes that there is sufficient evidence to support a charge of academic misconduct, he/she will forward the transmittal form and all evidentiary material to the dean/dean's designate, normally within ten working days of receipt of the allegation from the instructor/advisor.
   d. Normally within ten working days of receipt of the chair from the dean, the dean will invite the student to meet with him/her to discuss the allegation(s). If the student does not respond within ten working days to the request for an interview, or if the student refuses to attend an interview, the dean may proceed with the case. The student may be accompanied at the meeting by a support person. Prior to meeting with the student, the dean may consult with any individuals he/she believes pertinent to the case. At the meeting, the student will be presented with the evidence collected by the dean to that point. Based on the student's response to the evidence, the dean may engage in further consultation with any individuals he/she deems pertinent to the case. The student will be informed of any other evidence gathered as a result of those consultations and be given an opportunity to respond prior to the dean's reaching a decision on the case.
   e. If after weighing the available evidence the dean finds an offence has been committed, the dean will contact Enrolment Services/Office of Graduate Studies as appropriate to determine whether this is a first offence.
   f. In determining the appropriate penalty, the dean will consult the Guidelines for Penalties for Academic Misconduct, will take into consideration the recommendation from the instructor/advisor, and consider such factors as the relative weight of the assignment, the semester level of the student, any record of previous offences, the seriousness of the offence (e.g. the amount of work plagiarized), and any mitigating circumstances presented by the student. For graduate students, attention will also be paid to whether the work in which the offence has been committed is one of the major milestones of the graduate program (e.g., qualifying examination, thesis).
   g. Normally within ten working days of the meeting with the student, or ten days from the date of the final communication with the student with respect to any additional evidence, the dean will inform the student in writing of the disposition of the case. In a case where the dean requires substantial additional time to review the evidence and come to a judgment, he/she may seek an extension of time from the Provost.

The responsibility for detecting academic misconduct in the context of an academic environment that is not part of the formal examination or assignment process rests with the entire University community. Where academic misconduct is suspected, but where it is unclear whether it is directly related to a specific course, or where the specific course is unknown, those with knowledge of an offence should contact the dean of the college in which the student is enrolled and the Dean of Graduate Studies in the case of a graduate student. If the suspected offence appears to be related to a specific course, then the instructor of the course should be contacted.

C. Investigation and Judgment

1. Offences Related to Course Work, Research, Thesis Work or Examinations
   a. When an instructor or an advisor suspects that an academic offence has been committed, he/she is responsible for gathering evidence to support or allay the suspicion and may invite the student to meet with him/her to discuss the concerns. The instructor/advisor should pursue the gathering of evidence in a timely way. The normal expectation for assignments due within the semester is that instructors/advisors will complete their evidence gathering within ten working days of the due date for the assignment. For assignments submitted at the end of the semester or during the examination period, the instructor has until the tenth day of the subsequent semester to collect the evidence and determine whether to pursue a case. In a case where an instructor/advisor requires substantial additional time to collect and review the evidence, he/she may seek an extension of time from the chair.
   b. If after reviewing the available evidence the instructor/advisor believes an offence may have been committed, he/she shall refer the case to the chair of the department responsible for the course or graduate program. The referral document will include all evidentiary material collected by the instructor/advisor along with the transmittal form on which the instructor/advisor may include a recommendation with respect to penalty should the allegation be upheld. A copy of the first page of the transmittal form shall be sent to Enrolment Services/Office of Graduate Studies by the chair.
   c. If the chair believes that there is sufficient evidence to support a charge of academic misconduct, he/she will forward the transmittal form and all evidentiary material to the dean/dean's designate, normally within ten working days of receipt of the allegation from the instructor/advisor.
   d. Normally within ten working days of receipt of the chair from the dean, the dean will invite the student to meet with him/her to discuss the allegation(s). If the student does not respond within ten working days to the request for an interview, or if the student refuses to attend an interview, the dean may proceed with the case. The student may be accompanied at the meeting by a support person. Prior to meeting with the student, the dean may consult with any individuals he/she believes pertinent to the case. At the meeting, the student will be presented with the evidence collected by the dean to that point. Based on the student's response to the evidence, the dean may engage in further consultation with any individuals he/she deems pertinent to the case. The student will be informed of any other evidence gathered as a result of those consultations and be given an opportunity to respond prior to the dean's reaching a decision on the case.
   e. If after weighing the available evidence the dean finds an offence has been committed, the dean will contact Enrolment Services/Office of Graduate Studies as appropriate to determine whether this is a first offence.
   f. In determining the appropriate penalty, the dean will consult the Guidelines for Penalties for Academic Misconduct, will take into consideration the recommendation from the instructor/advisor, and consider such factors as the relative weight of the assignment, the semester level of the student, any record of previous offences, the seriousness of the offence (e.g. the amount of work plagiarized), and any mitigating circumstances presented by the student. For graduate students, attention will also be paid to whether the work in which the offence has been committed is one of the major milestones of the graduate program (e.g., qualifying examination, thesis).
   g. Normally within ten working days of the meeting with the student, or ten days from the date of the final communication with the student with respect to any additional evidence, the dean will inform the student in writing of the disposition of the case. In a case where the dean requires substantial additional time to review the evidence and come to a judgment, he/she may seek an extension of time from the Provost.

2. Term assignments, including research and thesis work
   The initial responsibility for detecting academic misconduct in an examination lies with the invigilators, although they make use of reports from others to assist them in detection. In cases of suspected impersonation, the chief invigilator shall require the student concerned to remain after the examination until the student is satisfactorily identified. In other cases of suspected academic misconduct, the chief invigilator shall allow the student to complete the examination, but:
   • may require that the student complete the examination in another location or setting when it is deemed that such action will cause the least disruption of those taking the examination; and
   • shall confiscate any suspect material (including those portions of the examination completed to that point) and give it, along with the student’s other examination booklet(s) (collected at the end of the exam) to the instructor immediately following the examination.
   The chief invigilator shall give a full report, together with any confiscated material, to the instructor-in-charge of the course if the instructor is not the chief invigilator. In instances of open learning courses, the material will be submitted to the Director of Open Learning and Educational Support. The student is required to contact the instructor no later than the end of the examination period.

3. Cases outside the domain of examinations or assignments

The responsibility for detecting academic misconduct in the context of an academic environment that is not part of the formal examination or assignment process rests with the entire University community. Where academic misconduct is suspected, but where it is unclear whether it is directly related to a specific course, or where the specific course is unknown, those with knowledge of an offence should contact the dean of the college in which the student is enrolled and the Dean of Graduate Studies in the case of a graduate student. If the suspected offence appears to be related to a specific course, then the instructor of the course should be contacted.
Should the dean determine that an academic offence has been committed, he/she shall inform the student in writing. The written notification should include the offence for which the student has been found guilty and information with respect to penalty. Copies of the written notification should be sent to any other relevant dean(s) office(s), to the instructor/advisor, the department chair, the program counsellor and to Enrolment Services/Office of Graduate Studies (as appropriate).

b. In a case where the dean believes suspension or a recommendation for expulsion/revocation is warranted, he/she should consult with the Provost and Vice-President Academic before making a final determination with respect to penalty.

c. Should the dean recommend expulsion or revocation/rescinding of a degree, he/she shall so inform the student in writing and forward the matter to the Senate Committee on Student Petitions.

At that time, the student may appeal the recommendation of expulsion/revocation and request a hearing of the Senate Committee on Student Petitions. Whether or not a hearing is requested, the Senate Committee on Student Petitions will proceed with the case and inform the parties involved of its decision.

In the case of an expulsion, the Senate Committee on Student Petitions may decide to uphold the recommendation to expel, in which case the recommendation will be forwarded to the President for final decision. Alternatively, the Senate Committee on Student Petitions may decide to impose a lesser penalty, in which case the President's assent is not required. When a recommendation is referred to the President, the President may uphold the recommendation to expel or impose a lesser penalty, which will be final.

In the case of revocation/rescinding of a degree, if the Senate Committee on Student Petitions confirms the recommendation of rescinding/revocation of a degree, the recommendation will be forwarded to the President. If the President does not confirm the recommendation of rescinding/revocation of a degree, the President may impose a lesser penalty, which will be final. If the President confirms the recommendation, the recommendation will be forwarded to Senate for final decision with respect to revocation/rescinding. If the Senate does not confirm the recommendation of revocation/rescinding, the matter will be returned to the President for a final decision with respect to a lesser penalty.

A statistical record will be kept by the Office of the Dean for annual reporting purposes.

2 Other Offences

a. Cases involving offences that are not course-related or are not related to graduate program work are dealt with by the relevant dean (see Procedures A. Notes Re: Procedures and Authority to Act). Examples of such offences include, but are not limited to falsification of credentials for admission purposes, damaging of library materials, abetting the cheating of another in a course in which the abettor is not enrolled, and obstructing or interfering with the academic activities of others.

b. When a case is brought to the attention of the dean, the dean shall inform the student that an allegation has been made and invite the student to meet to discuss the allegation. The dean will also inform Enrolment Services/Office of Graduate Studies (as appropriate). If the student does not respond within ten working days to the request for an interview or refuses to attend an interview, the dean may proceed with the case. The student may be accompanied at the meeting by a support person. Prior to meeting with the student, the dean may meet with any individuals or collect evidence as he/she deems pertinent to the case. At the meeting, the student will be presented with the evidence collected by the dean to that point. Based on the student's response to the evidence, if necessary the dean may consult with any other individuals he/she deems pertinent to the case. The students will be informed of any other evidence gathered as a result of these consultations and be given an opportunity to respond prior to the dean's reaching a decision on the case.

c. If after weighing the available evidence the dean finds that an offence has been committed, the dean will contact Enrolment Services/Office of Graduate Studies as appropriate to determine whether this is a first offence. The dean may impose penalties in accordance with Penalties A. and B., above. In the event that the dean believes suspension, expulsion or revocation to be warranted, he/she shall proceed as in Procedures C.1. (b) and (i).

d. Normally within ten days of meeting with the student, or of the final communication with the student with respect to evidence, the dean shall inform the student in writing of his/her decision in the case, and copy the letter to the relevant university officials, including Enrolment Services/Office of Graduate Studies (as appropriate). In a case where the dean requires substantial additional time to gather evidence and make a judgment, he/she may seek an extension from the Provost and Vice-President Academic.

2. Appeals must be submitted to the Senate Student Petitions Committee within 10 working days of receipt of the decision. If the decision is mailed, it will be deemed to have been received by the student the fifth day after it has been mailed. If the decision is sent by courier, fax or email it shall be deemed to have been received one day after it has been sent.

3. An appeal to the Senate Committee on Student Petitions involves an examination of all relevant documents and evidence to determine the appropriateness of a finding of guilt or of the assessed penalty. The procedures for conducting an appeal and for holding a hearing are set out in the Bylaws of the Senate Committee on Student Petitions. Following an appeal or hearing, the Senate Committee on Student Petitions may take one or more of the following courses of action:
   a. confirm a finding of guilt;
   b. reverse a finding of guilt (in which case no penalty shall apply);
   c. confirm a penalty;
   d. assess a different penalty.

Record of Academic Misconduct

Enrolment Services, or the Assistant VP of Graduate Studies, or the Director of Open Learning and Educational Support as appropriate, shall place in the student's file a record of all academic misconduct for which the student is penalized. Students in the Associate Diploma Program who are found guilty of academic misconduct in an Independent Study course taken through OAC Access towards their Associate Diploma will have the record of the finding of guilt placed against the appropriate term.

The record of academic misconduct shall be expunged from the student's file upon graduation, or for open learners, upon completion of a certificate or diploma. Students who do not graduate from the University of Guelph or another university may submit an application to the Senate Committee on Student Petitions to have the record expunged no sooner than five years after the date of last registration. Students who have graduated at another accredited university may submit verification of graduation to Enrolment Services/Office of Graduate Studies and have their record expunged. The record for expulsion is permanent, unless removed by petition to the President.

Access to the record of academic misconduct will be limited to those involved in processing appeals and those involved in processing additional complaints against the student.

Guidelines for Penalties for Academic Misconduct

With the finding of academic misconduct, there is a mandatory penalty of Official Warning which will stay on the student's record until graduation. In addition, one or more other penalties may be assessed. Following are guidelines used by chairs/directors and deans in determining the appropriate additional penalties. Users need to be aware that these are guidelines and that not all cases will fit neatly into the categories.

The guidelines below provide a range of penalties (minima and maxima) for the various offences identified in the Policy on Academic Misconduct as well as indicate what penalty is deemed to be the “norm” for the offence in the case of a first or second year student. It should be noted that “subsequent offence” means any subsequent offence, not only a subsequent offence in the same category.

For a course-based offence, the chair/director may assign penalties up to and including loss of grades if the offence is a first offence. If there is a previous offence on the student’s record, or if the chair/director believes a stronger penalty is merited, the case is forwarded to the dean for full penalty assessment.

In cases where the dean is of the opinion that there is cause for a penalty different from those indicated in the guidelines (either higher or lower), he/she will review the penalty with the Provost and Vice-President Academic. The dean will also consult with the Provost in cases where the contemplated penalty is suspension or expulsion.

In a case where the dean is of the opinion that the finding of guilt is not supported by the evidence, the dean will review the case with the chair/director. If the chair/director and dean are unable to reach an agreement on the case, the dean will consult with the Provost before making final determinations as to the finding of guilt and any penalty to be applied in the event that dean upholds the finding of guilt.

In determining the appropriate penalty the chair/director or dean will take into consideration these guidelines, the recommendation from the instructor, the recommendation from the chair/director (in the case of a dean assigning a penalty), and any other relevant factors such as the relative weight of the assignment, the semester level of the student, the seriousness or extent of the offence (e.g., the amount of work plagiarized), any record of previous offences, and any mitigating circumstances presented by the student.

Guidelines for Penalties for Academic Misconduct in Addition to Official Warning

A. Misappropriation of Other’s Work

In the tables below (N) indicates the normal expectation for penalty for a first or second year undergraduate, or first year graduate student.
### 1. Plagiarism

**Misappropriation of Other’s Work - Plagiarism**

<table>
<thead>
<tr>
<th>Offences</th>
<th>First Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor</td>
<td>Resubmission of new work</td>
<td>(N) Loss of grades</td>
</tr>
<tr>
<td></td>
<td>Zero on the assignment</td>
<td>Loss of grades</td>
</tr>
<tr>
<td></td>
<td>Zero in the course</td>
<td>(N) Zero on the assignment</td>
</tr>
<tr>
<td></td>
<td>Loss of scholarship/bursary suspension</td>
<td>Zero in the course</td>
</tr>
<tr>
<td></td>
<td>(N) Suspension</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td></td>
<td>Expulsion/Revocation</td>
<td>(N) Suspension</td>
</tr>
</tbody>
</table>

| Major          | (N) Zero in the course | Loss of scholarship/bursary suspension |
|                | Zero in the course | Loss of scholarship/bursary suspension |
|                | (N) Suspension | Expulsion/Revocation |

### 2. Copying

**Misappropriation of Other’s Work - Copying**

<table>
<thead>
<tr>
<th>Offences</th>
<th>First Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor</td>
<td>Resubmission of new work</td>
<td>(N) Loss of grades</td>
</tr>
<tr>
<td></td>
<td>Zero on the assignment</td>
<td>Loss of grades</td>
</tr>
<tr>
<td></td>
<td>Zero in the course</td>
<td>(N) Zero on the assignment</td>
</tr>
<tr>
<td></td>
<td>Loss of scholarship/bursary suspension</td>
<td>Zero in the course</td>
</tr>
<tr>
<td></td>
<td>(N) Suspension</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td></td>
<td>Expulsion/Revocation</td>
<td>(N) Suspension</td>
</tr>
</tbody>
</table>

| Major          | (N) Zero in the course | Loss of scholarship/bursary suspension |
|                | Zero in the course | Loss of scholarship/bursary suspension |
|                | (N) Suspension | Expulsion/Revocation |

### 3. Unauthorized Collaboration

**Misappropriation of Other’s Work - Unauthorized Collaboration**

<table>
<thead>
<tr>
<th>Offences</th>
<th>First Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor</td>
<td>Resubmission of work</td>
<td>(N) Loss of grades</td>
</tr>
<tr>
<td></td>
<td>Zero on the assignment</td>
<td>Loss of grades</td>
</tr>
<tr>
<td></td>
<td>Zero in the course</td>
<td>(N) Zero on the assignment</td>
</tr>
<tr>
<td></td>
<td>Loss of scholarship/bursary suspension</td>
<td>Zero in the course</td>
</tr>
<tr>
<td></td>
<td>(N) Suspension</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td></td>
<td>Expulsion/Revocation</td>
<td>(N) Suspension</td>
</tr>
</tbody>
</table>

| Major          | (N) Zero in the course | Loss of scholarship/bursary suspension |
|                | Zero in the course | Loss of scholarship/bursary suspension |
|                | (N) Suspension | Expulsion/Revocation |

### B. Misrepresentation and Fraud

#### 1. Impersonation

**Misrepresentation and Fraud - Impersonation**

<table>
<thead>
<tr>
<th>Offences</th>
<th>First Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor</td>
<td>(N) Zero on the assignment</td>
<td>Loss of grades</td>
</tr>
<tr>
<td></td>
<td>Zero in the course</td>
<td>(N) Zero on the assignment</td>
</tr>
<tr>
<td></td>
<td>Loss of scholarship/bursary suspension</td>
<td>Zero in the course</td>
</tr>
<tr>
<td></td>
<td>(N) Suspension</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
</tbody>
</table>

| Major          | Zero in the course | Loss of scholarship/bursary suspension |
|                | (N) Suspension | Expulsion/Revocation |

#### 2. Falsification

In addition to any penalty that may be applied, if a document is discovered to have been falsified, the document is null and void and the action permitted by the document is reversed.

If the falsified document is course-related (e.g. medical note) a zero in the course is the normal expectation for penalty for a first offence.

**Misrepresentation and Fraud - Falsification**

<table>
<thead>
<tr>
<th>Offences</th>
<th>First Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor and Major</td>
<td>Resubmission of work</td>
<td>Loss of grades</td>
</tr>
<tr>
<td></td>
<td>Zero on the assignment</td>
<td>Zero in the course</td>
</tr>
<tr>
<td></td>
<td>Loss of scholarship/bursary suspension</td>
<td>(N) Suspension/revocation of admission offer</td>
</tr>
<tr>
<td></td>
<td>(N) Suspension</td>
<td>Expulsion/Revocation</td>
</tr>
</tbody>
</table>

| Major          | Zero in the course | Loss of scholarship/bursary suspension |
|                | (N) Suspension | Expulsion/Revocation |

#### 3. Withholding of documents

If the withheld information would have affected admission to a course then a zero in the course is the normal expectation for penalty for a minor subsequent offence.

### Misrepresentation and Fraud - Withholding of documents

<table>
<thead>
<tr>
<th>Offences</th>
<th>First Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor</td>
<td>(N) Official warning</td>
<td>Loss of grades</td>
</tr>
<tr>
<td></td>
<td>Resubmission of work</td>
<td>Zero in the assignment</td>
</tr>
<tr>
<td></td>
<td>(N) Zero on the assignment</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td>Major</td>
<td>Zero in the course</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td></td>
<td>(N) Zero on the course</td>
<td>(N) Expulsion/Revocation of degree or admission offer</td>
</tr>
</tbody>
</table>

### 4. Unauthorized Aids

**Misrepresentation and Fraud - Unauthorized Aids**

<table>
<thead>
<tr>
<th>Offences</th>
<th>First Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor and Major</td>
<td>Resubmission of work</td>
<td>Loss of grades</td>
</tr>
<tr>
<td></td>
<td>Loss of scholarship/bursary suspension</td>
<td>Zero in the course</td>
</tr>
<tr>
<td></td>
<td>(N) Zero on the assignment</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td></td>
<td>(N) Suspension</td>
<td>Expulsion/Revocation</td>
</tr>
</tbody>
</table>

### C. Improper Access and Obstruction

These offences may also be subject to penalty under the Policy on Non-Academic Misconduct.

#### 1. Preventing Access

**Improper Access and Obstruction - Preventing Access**

<table>
<thead>
<tr>
<th>Offences</th>
<th>First Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor</td>
<td>(N) Official warning</td>
<td>Loss of grades</td>
</tr>
<tr>
<td></td>
<td>Resubmission of work</td>
<td>Zero in the assignment</td>
</tr>
<tr>
<td></td>
<td>(N) Zero on the assignment</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td>Major</td>
<td>Zero in the course</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td></td>
<td>(N) Zero in the course</td>
<td>(N) Expulsion/Revocation of degree or admission offer</td>
</tr>
</tbody>
</table>

### 2. Obstruction and Interference

**Improper Access and Obstruction - Obstruction and Interference**

<table>
<thead>
<tr>
<th>Offences</th>
<th>First Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor and Major</td>
<td>Loss of grades</td>
<td>Zero in the course</td>
</tr>
<tr>
<td></td>
<td>Loss of scholarship/bursary suspension</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td></td>
<td>(N) Zero on the assignment</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td></td>
<td>(N) Suspension</td>
<td>Expulsion/Revocation</td>
</tr>
</tbody>
</table>

#### 3. Improper Access

**Improper Access and Obstruction - Improper Access**

<table>
<thead>
<tr>
<th>Offences</th>
<th>First Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor and Major</td>
<td>Loss of grades</td>
<td>Zero in the course</td>
</tr>
<tr>
<td></td>
<td>Loss of scholarship/bursary suspension</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td></td>
<td>(N) Zero on the assignment</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td></td>
<td>(N) Suspension</td>
<td>Expulsion/Revocation</td>
</tr>
</tbody>
</table>

#### 4. Improper Dissemination

**Improper Access and Obstruction - Improper Dissemination**

<table>
<thead>
<tr>
<th>Offences</th>
<th>First Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor and Major</td>
<td>Loss of grades</td>
<td>Zero in the course</td>
</tr>
<tr>
<td></td>
<td>Loss of scholarship/bursary suspension</td>
<td>Loss of scholarship/bursary suspension</td>
</tr>
<tr>
<td></td>
<td>(N) Zero on the course</td>
<td>(N) Expulsion/Revocation</td>
</tr>
</tbody>
</table>

### Academic Review Sub-Committee Procedures

A request for academic consideration should be made by the student to the Academic Review Sub-Committee during, or immediately after, the semester to which it refers. A request for a deferred privilege for a missed final examination or other course requirements not completed must be submitted, along with supporting documentation, to the program counsellor within five working days of the missed examination/course work deadline. If a student is appealing a required to withdraw decision, the student should consult with their program counsellor about the deadline before submitting the “Request for Academic Consideration” form.

The Academic Review Sub-Committee will consider requests for academic consideration with regard to:
1. Course results (e.g. late drop of a course(s) with or without failure, deferred or supplemental privileges, credit status).

2. Meeting the continuation of studies requirements (e.g. probationary status).

3. Meeting the graduation requirements.

All requests are to be made in writing, preferably type-written, on the "Request for Academic Consideration" form available from Enrolment Services, Office of Registrarial Services at https://www.uoguelph.ca/registrar/downloads, or from their program counsellor. Request forms must be accompanied by relevant supporting documentation. Requests that are inadequately documented or that lack clarity will not be dealt with but will be returned to the student. The student should meet with the program counsellor for advice on the preparation and submission of requests for academic consideration. A request for a deferred privilege for a missed final examination or other course requirements not completed must be submitted, along with supporting documentation, to the program counsellor within five working days of the missed examination/course work deadline.

When the form is complete, the student should retain a copy along with copies of all documentation submitted. The form, with the original documentation attached, should be submitted to the student's program counsellor.

The Associate Registrar, Enrolment Services, or designate, shall maintain a record of the sub-committee's decisions and inform each student in writing as to the disposition of the request.

An appeal of an Academic Review Sub-Committee's decision may be submitted to the Senate Committee on Student Petitions within 10 days of the decision. Students who are appealing the decision of an Academic Review Sub-Committee for denial of probationary status will not be allowed to attend classes pending the outcome of the petition.

Academic Standing

Eligible to Continue

A student who does satisfy the program requirements for continuation of study will be eligible to continue.

Probationary

A student who does not satisfy the program requirements for continuation of study will be required to withdraw from the University for a minimum of two semesters (see Continuation of Study in this section).

Students who do not satisfy the program requirements may appeal to the Academic Review Sub-Committee for probationary status to be granted based on medical, psychological or compassionate grounds.

Readmission to a program at the University of Guelph is not automatic. Students who are required to withdraw must apply for readmission to the University after completing the minimum two semesters of rustication. Students should consult Chapter IV--Admission Information regarding appropriate admission requirements and deadline dates.

A student who has been required to withdraw and who has made an appeal for probationary status to the Academic Review Sub-Committee will not be allowed to attend classes until such time that the appeal is granted.

A term academic standing is assigned to each completed semester according to the requirements of the Continuation of Study policy. A student whose term academic standing is Required to Withdraw according to the requirements of the Continuation of Study policy may have their term academic standing changed to "probation" as a result of a request for Academic Consideration.

Adding Courses

A student may not add a course in which pass standing (or higher) has been achieved on a previous course attempt unless so directed by the appropriate Academic Review Sub-Committee.

All course additions to a student's program for a particular semester are to be completed by the end of the add period. On the last day of the add period, students will be able to add courses up to a maximum of 3.25 credits on a first-come, first-served basis. Additionally, with a signature from the program counsellor, under exceptional circumstances a student will be able to enrol in more than 2.75 credits earlier in the process. The addition of a course after the end of the add period will be considered only in exceptional circumstances and will require the approval of both the instructor for the course and the program counsellor of the program in which the student is enrolled. The program counsellor's signature should be sought first but does not presume the judgment of the instructor as to the appropriateness of the late addition for his or her particular course. In practice, the following have been deemed to be exceptional circumstances: illness or compassionate grounds for missing all or part of the first three class days; interchanging courses with common lectures, one with and one without labs; late resolution of appeals; failure of a deferred course condition or examination; university errors in registration procedures.

Caution: Students granted permission to add a course after the end of the add period may encounter difficulty in mastering course content and may be unable to meet all course requirements. The University has no obligation to assist students to pick up material that has been missed because of late enrolment.

Course Requisite(s)

A student wishing to enrol in a course for which he/she does not have credit for the stated course requisite(s) may seek permission from the instructor to have the requisite(s) waived.

The student seeking the waiver must obtain a "Course Requisite/Restriction Waiver" and have it signed by the instructor. The student must then present the completed form to Enrolment Services for processing. Waiver forms are available from Enrolment Services, Office of Registrarial Services, Level 3, University Centre.

Distance Education Courses

Distance Education courses may be added up to the end of the add period, with the permission of the Open Learning and Educational Support.

Program Approval

Program Counsellor's approval is required to add courses if the student is adding more than the normal course load.

Regular Courses

Regular courses may be added without permission of the department. Regular courses are those courses that are not designated as Priority Access in Chapter XII.

Two-Semester Courses

When adding a two-semester course, students must complete the course selection process for each part of the course during the appropriate course selection period. (e.g. AGR*2351 in the Fall semester and AGR*2352 in the Winter semester). These courses must be taken in consecutive semesters as outlined in the course description.

Address for University Communication

Depending on the nature and timing of the communication, the University may use one of these addresses to communicate with students. Students are, therefore, responsible for checking all of the following on a regular basis:

Email Address

The University issued email address is considered an official address and will be used for correspondence from the University. Students are responsible for monitoring their University-issued email account regularly. See Chapter I--Statement of Students' Academic Responsibilities for more information.

Home Address

Students are responsible for maintaining a current mailing address with the University. Address changes can be made, in writing, through Enrolment Services.

Admissions

University of Guelph students may, at some point, be required to complete and submit an application form to the Admission Services Office. The two most common reasons for submitting this internal application form are: to apply to transfer from one degree program to another or to apply for readmission to a program.

Application forms must be submitted to Admission Services by the deadline date established for each semester. An application fee is payable at the time the application is submitted (refer to Chapter VI--Schedule of Fees).

Application deadline dates are published in Chapter IV--Admission Information.

Associated Program Requirements

Program Committees have the option of identifying, as requirements for graduation, program components that are not academic courses and do not carry an academic credit weight. Associated Program Requirements allow programs to give formal recognition (but not academic credit) to the successful completion of program components that are primarily non-academic but are judged by the program committee as essential to fulfill the objectives of a degree or diploma program. Associated Program Requirements, when valid, are identified in Chapter X--Degree Programs in the schedule of studies for each appropriate area of study.

Attendance at Class

Instructors will inform students of the attendance requirements for individual courses in accordance with the policy of the department or school.

Caution: A student who for any reason does not attend classes regularly, runs the risk of being unable to complete the work of the semester and is advised to report to the program counsellor for academic counselling upon return to classes.
### Auditing Courses

A student may audit a course upon approval of the department offering the course and payment of a fee. The department shall provide to persons intending to audit a course a written statement prescribing the extent to which they may participate in the work of the course. No official transcript record of audited courses will be provided. The procedures for registration and course changes are the same as for regular course attempts, except that after the end of the add period, a student who is registered under audit status for a particular course is committed to that status and may not convert to credit status for the same course. A student may change from credit to audit status up to the drop deadline applicable to that course, with approval. A fee is assigned for each audit course (refer to Chapter VI–Schedule of Fees) except in the case of a student holding full-time classification. Full-time students who have received approval for audit courses are not assessed additional fees.

Permission to audit must be obtained from the instructor for the course, the chair of the department offering the course, and the student's program counsellor.

The student who receives approval to audit should discuss with the instructor the conditions under which that approval is given including, for example, attendance, submission of term work, taking of examinations.

Ability to register in an Audit Section is subject to capacity availability.

An approved audit course does not constitute a course attempt. No official grade will be reported, and audit courses will not be used in the determination of the eligibility for continuation of study. Also, no official documentation will be provided to verify the auditing of a course.

Audit courses are not considered in calculating full-time or part-time status.

### Class Level Calculation

All programs determine class level on the basis of successfully completed credits plus the number of credits in progress. As courses are dropped and added, or grades are received, the class level may be adjusted accordingly. Class Level is determined as follows:

<table>
<thead>
<tr>
<th>Successfully Completed Credits and Credits In-progress</th>
<th>Class Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25 - 2.50</td>
<td>1</td>
</tr>
<tr>
<td>2.75 - 5.00</td>
<td>2</td>
</tr>
<tr>
<td>5.25 - 7.50</td>
<td>3</td>
</tr>
<tr>
<td>7.75 - 10.00</td>
<td>4</td>
</tr>
<tr>
<td>10.25 - 12.50</td>
<td>5</td>
</tr>
<tr>
<td>12.75 - 15.00</td>
<td>6</td>
</tr>
<tr>
<td>15.25 - 17.50</td>
<td>7</td>
</tr>
<tr>
<td>17.75 - 20.00</td>
<td>8</td>
</tr>
<tr>
<td>20.25 - 22.50</td>
<td>9</td>
</tr>
<tr>
<td>22.75 (or more)</td>
<td>10</td>
</tr>
</tbody>
</table>

### Credit Standing

In rare circumstances, where a student has:

- a. not completed a course’s requirements and would normally be eligible for a deferred privilege but is unable to complete one because they are impacted by extreme medical, psychological or compassionate circumstances beyond their control, or
- b. where extreme circumstances have impacted the student’s level of achievement as reflected in the final course grade,

they may submit a request to the Academic Review Sub-committee for credit standing in the course.

Under a) above, in circumstances where students are able to provide appropriate documentation that there is little reasonable expectation that the outstanding components of evaluation can be completed by the end of the subsequent semester, they may make a request for credit standing.

Under b) above, in circumstances where students are able to provide appropriate documentation that their level of achievement as reflected in the final course grade was impacted by extreme circumstances, they may make a request for credit standing.

“Extreme circumstances” are generally defined as catastrophic circumstances beyond the student’s control that renders the student incapable of accessing the academic consideration process.

A student awarded “credit standing” by the Academic Review Sub-committee will receive credit for the course(s) with the notation of CRD instead of a numerical grade. The effect of this on the student’s program is that the course(s) are not included in the calculation of the student’s overall cumulative or semester average, or specialization average.

The request for credit standing must be made in writing to the Academic Review Subcommittee of the student’s degree program, and it must be accompanied by supporting documentation. For students to be considered for credit standing, they must have:

- i. Completed at least 75% of the graded components of the course(s) for which credit standing is being requested; and
- ii. Received a cumulative passing grade for the components of the course which were evaluated.

Students must submit written requests for credit standing, along with their supporting documentation, to the Academic Review Sub-committee via their Program Counsellor within the first 20 class days of the subsequent semester. Students’ written requests for credit standing must include an explanation of why they are unable to undertake or complete a deferred privilege in order to complete the course’s evaluative components and/or an explanation of the extreme circumstances which affected their final course grade.

Requests for Credit Standing are not normally granted more than once in a student’s program and consideration is limited to a maximum of one semester of courses in the student’s program (a single request may include one, some, or all courses in the semester specified in the request).

### Continuation of Study

For continuation of study within a degree program, Open Learning or General Studies, a student must satisfy the conditions as set down under Schedule 1 or Schedule 2. The appropriate schedule will be determined by the criteria outlined below.

Schedule 3 is outlined in the Diploma Program Calendar and is only applicable to students registered in a Diploma program.

Schedule 5 is outlined in the Degree Programs Chapter of this calendar (Chapter X–Doctor of Veterinary Medicine) and is only applicable to students registered in the Doctor of Veterinary Medicine program.

### Schedule 1 Regulations

All degree programs, Open Learning and General Studies have established conditions which must be met for continuation of study. Continuation of study within a program is permitted provided the standards of academic performance listed below are met. In some instances, students not meeting the requirements may be allowed to proceed on probation (see Academic Standing-Probationary). If these conditions are not met, the student will be required to withdraw from the program for a minimum of two semesters and may apply for readmission after that period of time.

The continuation of study regulations at the University of Guelph are based on the principle that students must maintain a minimum average of 60%. To allow for transition issues, some leniency has been built into the minimum average requirement during the first 5.00 credit attempts. The student’s cumulative average will be reviewed first. If the student’s cumulative average does not meet the minimum required, the student will either be required to withdraw or placed on probation. When a student is placed on probation he/she will be required to obtain a minimum semester average. In subsequent semesters the student will either be required to withdraw, allowed to continue on probation, or be placed back on regular status. Students will be taken off probation once their cumulative average is greater than, or equal to 60%.

### Number of Credit Attempts: between 0.25 and 2.50

Students who have attempted between 0.25 and 2.50 credits will be allowed to continue regardless of the cumulative average. Students will be placed on probation if their cumulative average falls below 50%.

### Number of Credit Attempts: between 2.75 and 5.00

If Eligible to Continue

Continuation of Study Assessment for Students in Semester 2 following Schedule 1

<table>
<thead>
<tr>
<th>Cumulative Average (C)</th>
<th>Status of Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>C &lt; 50%</td>
<td>Required to Withdraw</td>
</tr>
<tr>
<td>C ≥ 50% and C &lt; 60%</td>
<td>Probationary Status</td>
</tr>
</tbody>
</table>
VIII. Undergraduate Degree Regulations and Procedures, Course Sections

Cumulative Average (C) | Status of Student
---|---
C ≥ 60% | Eligible to Continue

If on Probation

Continuation of Study Assessment for Students in Semester 2 on Probation following Schedule 1

Cumulative Average (C) | Status of Student
---|---
S < 50% or C < 50% | Required to Withdraw
S ≥ 50% but C < 50% | Required to Withdraw
S ≥ 50% but C < 60% | Probationary Status
C ≥ 60% | Eligible to Continue

Number of Credit Attempts: more than 5.00

If Eligible to Continue

Continuation of Study Assessment for Students in Semester 3 and Higher following Schedule 1

Cumulative Average (C) | Status of Student
---|---
C < 50% | Required to Withdraw
C ≥ 50% and C < 60% | Probationary Status
C ≥ 60% | Eligible to Continue

If on Probation

Continuation of Study Assessment for Students in Semester 3 and Higher on Probation following Schedule 1

Cumulative Average (C) | Status of Student
---|---
S < 60% | Required to Withdraw
S ≥ 60% but C < 60% | Probationary Status
C ≥ 60% | Eligible to Continue

Schedule 2

Normally students who transfer from another university or college will be required to follow Schedule 2. Students who are readmitted to this University but whose prior record renders them ineligible to proceed under Schedule 1 will be required to follow Schedule 2.

Schedule 2 Regulations

Continuation of study is permitted provided the student meets the conditions outlined below. In some instances, students not meeting the requirements may be allowed to proceed on probation. If these conditions are not met, the student will be required to withdraw from the program for a minimum of two semesters and may apply for readmission after that time.

The continuation of study regulations are based on the principle that students must be maintaining a 60% average. The details of the continuation of study model follow. The student's cumulative average will first be reviewed. If it does not meet the required level, the student will either be required to withdraw or placed on probation. Students who are placed on probation will be required to obtain a given semester average in subsequent semesters. As a result of this review, the student will either be required to withdraw, remain on probation, or placed back on regular status. Students will be taken off probation once their cumulative average is greater than, or equal to 60%.

Continuation of Study is assessed each semester. Students whose cumulative average falls below 60% will be placed on probation for one semester, and then assessed based on their semester average.

If Eligible to Continue

Continuation of Study Assessment for Students following Schedule 2

Cumulative Average (C) | Status of Student
---|---
C < 50% | Required to Withdraw
C ≥ 50% and C < 60% | Probationary Status
C ≥ 60% | Eligible to Continue

If on Probation

Continuation of Study Assessment for Students on Probation following Schedule 2

Cumulative Average (C) | Status of Student
---|---
S < 60% | Required to Withdraw
S ≥ 60% but C < 60% | Probationary Status
C ≥ 60% | Eligible to Continue

Note: Alternative course evaluations will not be included in the Continuation of Study calculations [Pass (P), Outstanding Pass (OP), Fail (F), Credit Standing (CRD) or Withdrawal with Failure (WF)]. Courses taken on a letter of permission will also not be included in the calculations. Students negatively affected by the omission of these courses in the Continuation of Study calculations may appeal a continuation decision to the Academic Review Committee.

Course Sections

Course section information (WebAdvisor) indicates the meeting times and room for each course.

Students must attend the course section on their course schedule. In the event that a section change is necessary the student must drop the old section and add the new one following the add/drop process.

Department Chair’s Responsibilities

The department chair will designate the responsibility for the approving of section changes during the add period. The approval of section changes may be done by the department or the responsibility may be assigned to individual instructors.

Registrar’s Responsibilities

Enrolment Services confirms with the students on their individual course schedules (WebAdvisor) the course section in which they are enrolled.

Student’s Responsibilities

Students must stay in assigned course sections. In the event that a section change is desired the department and/or instructor offering the course must be consulted.

Course Selection

This is the procedure by which students indicate their course requests, including the appropriate course section for upcoming semesters. Program approval may be required as outlined in Chapter X—Doctor of Veterinary Medicine. Subject to the availability of a published timetable, students may select courses for more than one semester. Students are cautioned that courses may be subject to listed enrolment restrictions. In such cases, priority in the selection of students to receive the course will be given to those who have selected courses prior to the start of the semester. For further information, refer to Priority Access Courses in this section of the calendar.

Students are normally restricted to selecting 2.75 credits during course selection and up to the last day of the add period. A number of programs have Senate-approved schedules of study that require students to register in more than 2.75 credits for particular semesters. As a result, these programs are exempted from the 2.75 restriction as required.

On the last day of the add period, students are allowed to add courses up to a maximum of 3.25 credits on a first-come, first-served basis. Additionally, with approval from the program counsellor, under exceptional circumstances, a student can enrol in more than 2.75 credits earlier in the process.

New Students

A booklet including course selection material will be forwarded to new students by the Office of Registrarial Services. Consult this booklet to determine the procedures for course selection that pertain to the program to which you have applied. Students who are unable to select their courses prior to the deadline date have an opportunity to make their selection during the next add period.

In-Course Students

Course selection material for upcoming semesters will be available during the semester to all registered students. Students who are not currently registered should check WebAdvisor for course selection dates or refer to Chapter III—Schedule of Dates.

There is a scheduled course selection period each semester where students can select courses for upcoming semesters (refer to Section III—Schedule of Dates for the exact dates).

Course selection is important for a number of reasons:

- a billing is generated via WebAdvisor by Student Financial Services on the basis of the course selection.
- course sections may be full after the course selection period and those who have not selected courses may not be able to enrol in them.

Students are encouraged to select courses for more than one semester at a time, subject to the availability of an Undergraduate Course Timetable, if available.

Students are encouraged to select their courses using WebAdvisor, however, they may choose to complete an "Undergraduate Course Request" form. A separate "Undergraduate Course Request" form must be completed for each semester. "Undergraduate Course Request" forms must be submitted by the course selection deadline date for the applicable semester. Students who miss the course selection deadline must add their courses during the next add period (see Adding Courses and Dropping Courses in this section of the Undergraduate Calendar).

Detailed Instructions

Normally, course selection on WebAdvisor results in a class schedule indicating lecture and laboratory sections, room locations and examination schedules, as applicable.

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
A copy of a student's Academic Evaluation is available on WebAdvisor at all times. Students are encouraged to select their courses early and for more than one semester at a time.

Student's Responsibilities

1. Complete the Course Selection process.
2. Obtain program approvals if necessary (refer Chapter VII - Academic Advising).
3. Submit the request using WebAdvisor. If a student is required to submit a form to Enrolment Services he/she should complete the General section (Section A) of the Undergraduate Course Request form.

When a two-semester course is selected, students must complete the course selection process for each term during the appropriate course selection period. These courses must be taken in consecutive semesters as outlined in the course description. All inquiries regarding distance education courses should be directed to the Open Learning and Educational Support. http://opened.uoguelph.ca/

To change your specialization, please use the “Undergraduate Schedule of Studies Change Request” form and submit it to Enrolment Services.

It is the student's responsibility to ensure that the prerequisites have been satisfied for any course selected. Failure to do so will result in registration in the course being denied unless a "Course Waiver Request" form, showing instructor approval, is presented to Enrolment Services. NOTE: Students who select a course for a future semester and who fail or drop the prerequisite(s) for the course in the current semester must drop the course. A replacement may be added during the add period.

A student may not register for a course in which pass standing (or higher) has been achieved on a previous course attempt unless so directed by the appropriate Academic Review Sub-Committee.

Diploma courses are available only to students registered in one of the Associate Diploma programs. Degree students who register in Associate Diploma courses will have the courses dropped from their record.

Students not currently registered should check WebAdvisor or the Schedule of Dates for the course selection dates. Students missing the deadline dates will have to add their courses during the next add period.

Faculty Advisor's Responsibilities

All advisors should be familiar with any course restrictions that apply to courses in their departments.

Advisors should be prepared to help students plan a course program with emphasis on meeting specialization and program requirements for graduation.

Advisors should approve the overall course program where appropriate. Refer to Chapter VII - Academic Advising.

Program Counsellor's Responsibilities

A counsellor may withhold program approval if any of the following applies:

1. the student has not taken the necessary prerequisites or has not selected the necessary corequisites;
2. the program requirements stated as such in the Undergraduate Calendar are not observed;
3. the selection does not conform with decisions concerning the student that have been reached by the Admissions and Academic Review Sub-Committees.

A student wishing to take more than the normal number of credits must have the approval of the appropriate dean or designate. Refer to Chapter VII - Academic Advising.

Registrar's Responsibilities

To coordinate and prepare all course selection information for distribution to all in-course students and to receive all completed "Course Waiver Request" forms.

To produce course counts based on course selection and distribute the information to the appropriate department chair for his/her recommendations, regarding enrolment management.

Dean's Honours List

Effective Spring 1986, the University established a Dean's Honours List for full-time students which is recognized on students' transcripts. (Prior to Spring 1986 colleges used different criteria and the designation was not recognized on transcripts.) In Fall 1996 the Dean's Honours List procedures were revised to include all undergraduate programs.

Effective Spring 1991 the Dean's Honours List procedures were extended to accommodate part-time study (see 2. below). Part-time students must contact their College Dean's Office to formally request that the Dean's Honours List designation be applied to their official transcript. As part of the request, the student must identify the semester to be considered for the listing (e.g. Fall 2000). Approved requests will be forwarded by the Dean's Office to the Associate Registrar, Enrolment Services. The Dean's Honours List will include:

1. students taking full-time studies who have obtained a minimum semester average of 80.0%.
2. students who in part-time semesters (which do not need to be consecutive) attain a minimum cumulative average of 80.0% in a sequence of at least 2.00 credits. All credits will be counted and the designation will appear under the last of the semesters making up the average, and in the graduating semester of students who have maintained a cumulative average of 80.0% since their last Dean's Honours List Designation.
3. a student with a deferred condition, or a mark not received, or the first part of a two semester course in progress, will not be evaluated for placement on the Dean's Honours List until the academic record for that semester has been completed.
4. a part-time student who transfers from program to program within the University should consult the appropriate dean's office about the eligibility for the Dean's Honours List.

Students who have consistently maintained a high average, but for whom a change in program, in part-time status in the graduating semester, or other anomalies have prevented placement on the Dean's Honours List, should consult the appropriate dean's office about eligibility for the Dean's Honours List.

Students with a high level of academic achievement on exchange programs will be considered for the Dean's Honours List based on a recommendation to the appropriate Dean from the exchange co-ordinator.

Note: The calculation of full-time and part-time status for students includes courses with credit (CRD) standing or pass (P) standing. These courses do not affect the calculation of the averages used to determine Dean's Honours. Within each period of consideration there must be at least one course with a numeric grade for a student to qualify for Dean's Honours List unless the student has been on exchange for that period. Courses taken via Letter of Permission do not contribute the calculation of full-time or part-time status.

Deferred Privileges

When students do not write a required final examination, complete a final assignment, or complete a work term report by the deadline, they may be eligible for a deferred privilege.

A deferred privilege is the opportunity to complete the final course requirements after the end of the semester. The nature of the deferred privilege may take the form of either a Deferred Condition or a Deferred Examination. The Academic Review Sub-Committee grants deferred privileges on the basis of medical, psychological, or compassionate consideration (see Academic Consideration and Appeals).

Deferred privileges must be completed within the semester immediately following the semester in which the exam/course work was originally missed (refer to Chapter III--Schedule of Dates). If the Academic Review Sub-Committee assigns a passing grade or credit standing (CRD) on the basis of medical, psychological, or compassionate consideration, a student may request a deferred privilege instead. The student must make the request in writing to their Program Counsellor. The grade resulting from the deferred privilege will become part of the student's official academic record.

Instructors do not grant deferred privileges. They can only grant academic consideration for work that is due during the semester and cannot grant extensions beyond their deadline for submission of final grades. The instructor should note on the Incomplete Coursework Form any special circumstances relating either to the student or to the way the course was conducted (see Final Grades).

Enrolment Services records the results of deferred privileges, and re-evaluates the student's academic record for continuation of study. The University reserves the right to disallow registration until all deferred privileges are complete and the student's final standing is calculated.

Deferred Condition

The instructor and/or Chair/Director determine the requirements and conduct of the deferred condition. The deferred condition may be a written test, an oral test, an assignment, a laboratory practical, or any other method of evaluation. The requirements for completion of the deferred condition are documented on the “Terms of Supplemental/Deferred Condition” form https://www.uoguelph.ca/registrar/downloads and a copy of the form is retained by the instructor and the student. The department notifies Enrolment Services of the results of a deferred condition, normally within 7 days of its completion.

Students must normally complete a deferred condition by the end of the deferred examination schedule in the semester immediately following the completion of the course (refer to Chapter III--Schedule of Dates). Scheduling, Office of Registrarial Services advises students in writing of the deadline for the completion of a condition. In addition, Scheduling directs the student to the "Terms of Supplemental/Deferred Condition" form https://www.uoguelph.ca/registrar/downloads. It is the student's responsibility to contact the instructor and make arrangements for the details of the condition.

Scheduling advises departments via electronic mail of the students who have been granted deferred conditions. The memorandum specifies the date for completion of the deferred condition, and the deadline for the submission of final grades to Enrolment Services. It is the responsibility of the Chair/Director or designate to advise the appropriate instructors of the deferred conditions that have been granted.

VIII. Undergraduate Degree Regulations and Procedures, Dean's Honours List

Last Revision: July 4, 2019
If the condition is not completed by the required date, a grade is assigned based on the term work completed as indicated on the original Incomplete Coursework Form. An extension beyond the end of the deferred examination period will be granted only in extreme circumstances - and with provision of additional documentation - and must be completed within the same semester the original deferred condition was missed. Students may be considered for an extension or other consideration, if medical, psychological or compassionate reasons prevail at the time of the scheduled condition. In this case, the student should consult with their program counsellor and may submit a "Request for Academic Consideration" form with documentation within five working days of the missed examination deadline to their program counsellor.

Deferred Examination

Scheduling Services schedules and supervises deferred examinations that are two hours in length. Scheduling notifies departments of the deferred examination schedule and advises the students of the date, time and location of their deferred examinations. The Academic Review Sub-Committees expect students to write deferred examinations during the deferred examination period that follows the end of the semester in which the course was taken (refer to Chapter III--Schedule of Dates). When conflicts arise between a student's deferred final examination and a midterm examination, the deferred examination takes precedence. The instructor for the class in which the midterm is being written shall make appropriate accommodation, mutually agreeable the student and instructor, for the student to make up the missed midterm examination. If the student and instructor are not able to come to an agreement, they will refer the matter to the Chair/Director responsible for the course. An extension beyond the end of the deferred examination period will be granted only in extreme circumstances – and with provision of additional documentation – and must be completed within the same semester the original deferred examination was missed. Students may request an extension, or other consideration if medical, psychological or compassionate reasons prevail at the time of the scheduled deferred examination. In this case, the student should consult with their program counsellor and must submit a "Request for Academic Consideration" form with documentation within five working days of the missed examination deadline to their program counsellor.

Procedures for Deferred Privileges

Chair/Director’s Responsibilities

The Chair/Director or designated department/school examination coordinator is responsible for the following:

1. Requesting a deferred examination from the appropriate instructor upon request from Scheduling Services and informing the instructors of students who have been granted deferred privileges.
2. When a deferred examination is scheduled, forwarding one examination paper from the instructor for each student granted a deferred examination in the course, plus one extra paper per course to Scheduling Services.
3. Where the instructor is unavailable, providing the required examination papers to Scheduling Services.
4. At the end of the Deferred Examination period, collecting completed examination papers from Scheduling.
5. Immediately distributing the completed examination papers to the appropriate instructor for marking.
6. In the case where a student is unable to make contact with the instructor to determine the nature of a deferred condition, taking necessary steps to assist the student in determining the requirements for the condition.
7. (Chair/Director only) initialing all grades submitted by instructors and forwarding them to the Enrolment Services, Office of Registrarial Services, by the date indicated in the request letter.

Instructor’s Responsibilities

The course instructor is responsible for the following:

1. In the case of a deferred condition, completing the "Terms of Supplemental/Deferred Condition" form, providing student with a copy of the form, and keeping a copy. The instructor must adhere to the deadlines for the completion of the condition and the submission of the final grades to Enrolment Services, Office of Registrarial Services.
2. In the case of a deferred examination, providing examination papers to the Chair/Director and indicating what exam aids the student in writing the examination may use.
3. Prompt marking of deferred course materials and submission of grades to the Chair/Director or designate.

Student’s Responsibilities

1. When the Academic Review Sub-Committee grants a deferred condition, contacting the instructor of the course and presenting the "Terms of Supplemental/Deferred Condition" form upon notification. Students must contact the instructor of the course immediately, in order to complete the condition prior to the deadline specified by Scheduling. The deadline is normally the last day of the deferred examination period for the semester in which the course was taken (which falls in the semester immediately following the semester in which the course was taken, refer to Chapter III--Schedule of Dates). The student and instructor must complete the form, indicating the exact nature of the deferred condition. If the student cannot contact the instructor, he/she must contact the Chair/Director of the offering department/school. If the student does not make the required contact within the deadline specified by Scheduling, the University will assume that the student does not intend to complete the condition, and a grade will be assigned based on term work completed, as indicated on the original Incomplete Coursework Form.
2. When a deferred examination is granted, appearing for the deferred examination according to the date, time and location designated on the deferred examination timetable.
3. Students identified by Scheduling as residing outside a 150 km (approx) radius of Guelph are permitted to write deferred examinations at an academic institution (high school, college or university) within their own vicinity. Students choosing this option must have the Off-Site Invigilator Form completed by an employee at one of the above type of institutions and forward it to Scheduling. For more information, form and deadline see: https://www.uoguelph.ca/registrar/sites/undergraduate/files/docs/invigilator_form.pdf.

Registrar’s Responsibilities

1. Enrolment Services informs the student and Scheduling Services of academic review decisions, collects grades, and evaluates the continuation of study status when deferred grades have been recorded.
2. Scheduling Services informs the Chair/Director/designate that the Academic Review Sub-Committee has granted a deferred condition or examination; informs students who have been granted a deferred condition that it is their responsibility to contact the instructor to arrange the condition; specifies a deadline for completion of deferred conditions; prepares a deferred examination timetable and notifies all students who have been granted a deferred examination; identifies students residing 150 km (approx) from Guelph, and coordinates examinations with approved off-site invigilators (see Student’s Responsibilities above); requests the deferred examination papers from the Chair/Director/designate; invigilates the deferred examinations; at completion of the deferred examination period, prepares completed examination packages for each department/school, attaching a grade reporting sheet for each examination and noting which students did not write and which have been granted extensions by Program Counsellors; notifies department Chair/Director/designate that examination packages are ready for pickup in Scheduling.

Dropping Courses

All course drops from a student’s program for a particular semester are to be completed by the dates specified in the Chapter III--Schedule of Dates. Courses that are one semester long must be dropped by the last day of classes; two-semester courses must be dropped by the last day of classes in the second semester. The policy does not apply to the Doctor of Veterinary Medicine (DVM) program. Please refer to the Conditions for the Continuation of Study in the DVM Program Information section of the undergraduate academic calendar. The Academic Review Sub-Committee of the program in which the student is registered may grant a request to drop a course or courses after the deadline only if there are sufficient extenuating medical, psychological, or compassionate considerations (see Academic Consideration and Appeals). Students must submit written requests for a late drop, along with their supporting documentation, to their Program Counsellor no later than the 20th day of classes of the following semester. Student who are granted a late course drop will have reference to the course completely removed from their transcript.

Deadline Dates

In all cases, if course changes are made, using WebAdvisor or the "Undergraduate Course Request" form, the changes must be made by the drop deadline (refer to Chapter VI--Schedule of Fees for the refund schedule).

The deadline dates for dropping courses are noted in Chapter III--Schedule of Dates.

Instructor Notification

In some cases the instructor must be notified when a student is dropping a courses, for example, where students care for laboratory animals, or where supplies or books on loan must be returned. If instructor notification is required to drop the course, this will be specified on the course outline and announced in the first class meeting.
Refunds
Refer to Chapter VI—Schedule of Fees for the refund schedule. Students who have documented extenuating circumstances and wish to appeal the tuition fee penalties calculated based on the refund schedule should review the Tuition Fee Appeal Process https://www.uoguelph.ca/Registrar/studentfinance/fees/tuition-appeal.

Regular Courses
Regular courses may be dropped from the start of the add period to the last day of classes without approval except where instructor notification is required (see Instructor Notification above).

Two-Semester Courses
When dropping two-semester courses, both semesters of the course must be dropped. Students who wish to re-take a two-semester course must re-take both parts of the course. The drop deadline for a two-semester course is the last day of classes in the second semester.

Examinations
During the examination period, Saturday is considered a regular day. Examinations may be scheduled on public holidays. Students are advised to note Chapter III—Schedule of Dates. Students who encounter a conflict between a scheduled mid-term or final examination and a religious obligation (see Academic Accommodation of Religious Obligations) must contact the instructor-in-charge or their program councillor to request that alternate arrangements be made. A listing of major religious holidays is available from the Office of Student Affairs.

Mid-Term Examinations
Term tests must not be scheduled during the last five class days prior to the final examination period. Exceptions may be granted by the Dean (or designates) for practical evaluations such as a Laboratory or Studio tests, with the scheduling of such tests indicated in the course outline. Short quizzes which have been a regularly scheduled part of the course and which are intended to review small amounts of material are not considered term tests and may be held during the last five class days.

Departments are urged by the Board of Undergraduate Studies to make every effort to schedule term tests and examinations in regularly scheduled class time. The Board recommends that faculty make every effort to accommodate students representing the University in extra-curricular activities when there is a conflict between those activities and scheduled tests or examinations held outside regularly scheduled classes.

The directors of schools and department chairs must apply the policy having due regard to the special needs of courses over which they have jurisdiction.

The Board of Undergraduate Studies has reaffirmed the commitment to maintain the 17:20 to 19:00 time slot free of academic activities as much as possible. However, from time to time approval may be given to scheduling classes or labs in that time slot. Requests for scheduling out-of-class mid-term examinations should also be restricted as much as possible to regular academic hours (8:30-17:20) and 19:00-22:00). In the event that an appropriate space is not available during regular hours, the use of the 17:20-19:00 time slot may be approved.

Instructors are cautioned that if there is a scheduling conflict between a scheduled class for another course and the proposed time for the mid-term examination, the scheduled class takes priority and students with such a conflict must be accommodated.

When conflicts arise between deferred final examinations and midterm examinations, the deferred final examination must take precedence. The instructor for the class in which the midterm is being written shall make appropriate accommodation, mutually agreeable to the student and instructor, for the student to make up for the missed mid-term exam. If the student and the instructor are not able to come to a mutual agreement, the matter will be referred to the appropriate department chair.

All additional rooms for mid-term examinations are to be booked through Scheduling Services. orsrooms@uoguelph.ca

Chair/Director’s Responsibilities
1. The conduct of all term examinations.
2. Appointing an adequate number of invigilators to assist the instructor-in-charge.

Instructor’s Responsibilities
1. Taking attendance record at each term examination. The attendance record is for the department’s use and is not submitted to Registrarial Services.
2. Exercising discretion when requiring certification of illness. In particular, instructors are encouraged not to require certification of illness affecting semester work when the assessment in question constitutes a small proportion of the course grade, or when alternative means for carrying out the assessment are available.

Final Examinations/Assignments and Final Week of Classes

Final Week of Classes
Final term assignments or papers may be due in the last five class days prior to the final examination period. Due dates for these evaluations should be stated in the course outline. Final assignments along with all necessary resource material should be available to students no later than the end of the 9th week of classes. Take-home examinations may not be due in the last week of classes.

Term tests must not be scheduled during the last five class days prior to the final examination period. Exceptions may be granted by the Dean (or designates) for practical evaluations such as Laboratory or Studio tests, with the scheduling of such tests indicated in the course outline. Short quizzes which have been a regularly scheduled part of the course and which are intended to review small amounts of material are not considered term tests and may be held during the last five class days.

Final Examinations (Regular, Take-Home and Other Format) and Final Assignments
Where regular final examinations are to be given they must be discussed during the examination period. All regular final examinations shall be two hours in duration. The following guidelines for conducting final examinations have been approved by Senate.

1. Departments should indicate to Scheduling Services whether a final examination time slot is required for a course. Departments will indicate whether:
   • the examination will be a regular, sit-down examination for which a room is required;
   • the examination will be a take-home examination;
   • the examination will be in some other format (orals; computer exams; juried performance exams, etc.).

2. Unless approved by the Department Chair, examinations for 1000 level courses will be in regular, sit-down format only.

3. The final examination period should be scheduled so as to provide a two day break between the last day of classes and the first day of examinations.

4. The final examination period consists of eleven days, except in the Summer semester, where it is eight days.

5. The periods scheduled for final examinations which are to be written in examination halls shall be all of two hours in duration. No regular examination held during the final dates scheduled for final examination periods shall be longer than two hours.
   (Note: Some DVM courses are exempted from this rule and require three hour exams.)

6. Under normal circumstances, changes to the published examination timetable are not permitted.

7. Where final examinations in either regular, take-home or other format are to be given, they must be given or due during the final examination period.

8. The Office of Registrarial Services has determined the 9th day (6th day in the 12-week format summer semester; 4th day in the 6-week format summer semester) of the examination period as the final due date that may be assigned for take home examinations or exams given in other than regular, sit-down format. When using a take-home or other format final examination, departments will inform the Office of Registrarial Services whether they are using the 9th day (6th day in the 12-week format summer semester; 4th day in the 6-week format summer semester) of the examination period as the due date, or whether they are using an earlier date. This information must be provided to ORS before the beginning of the semester, and the due date must be noted on the course outline distributed at the first class meeting.

9. Faculty using take-home examinations will determine when the examination paper will be made available to students, but must allow students at least 72 hours between the date of issue of the exam and the due date. The date of issue of the examination and the due date must be included in the course outline distributed at the first class meeting. If a student's time to complete a take-home examination is significantly lessened because of the number and timing of regularly scheduled sit-down examinations, the instructor may grant an extension, provided the new due date is not beyond the grade submission deadline for the course. The student must initiate such a request no later than the end of the second week of classes. The length of the extension will be at the instructor’s discretion and instructors are advised to give the student the new due date in writing. The date of issue of the examination and its due date must be included in the course outline distributed at the first class meeting.

10. If the examination is to be handed out after the end of classes, the instructor will be responsible for arranging distribution and for ensuring that students have the appropriate opportunity to ask questions for clarification.
11. Final assignments or papers may be due either during the final examination period or in the last week of classes. In either case, the assignments along with all necessary resource material should be available to students no later than the end of the 9th week of classes and the due date and date of issue of the assignment must be included in the course outline distributed at the first class meeting. The Office of Registrarial Services has determined the 9th day (6th day in the 12-week format summer semester; 4th day in the 6-week format summer semester) of the examination period as the final due date that may be assigned for final assignments due in the examination period. When a final assignment used in lieu of a final examination is to be due in the examination period, the department will inform the Office of Registrarial Services whether they are using the 9th day (6th day in the 12-week format summer semester; 4th day in the 6-week format summer semester) of the examination period, or whether they are using an earlier date. This information must be provided to O.R.S. before the beginning of the semester and must be included on the course outline distributed at the first class meeting. Instructors who opt for an assignment to be due during the examination period may not also include a final examination in their courses.

The Office of Registrarial Services of the University is the final arbiter of the manner of conducting examinations and receives general directives on policy from the Provost and Vice President (Academic), and the Board of Undergraduate Studies. The Office of Registrarial Services will, in cooperation with the appropriate examiners, establish special examination procedures as and when needed, for students who have temporary or permanent physical disabilities. Medical opinion shall be sought whenever there is doubt about the extent of the disability.

Chair/Director’s Responsibilities
1. Completing the “Final Exam Request Form” by the deadline date set by Scheduling Services.
2. Completing the “Final Exam Location Request” by the deadline set by Scheduling Services.
3. Printing the required number of examination papers for each examination.
4. Providing for the security of examination papers printed in the department for the instructor.
5. Providing examination location information to instructors when the information is received from Scheduling, one week prior to the commencement of the final examination period.
6. Distributing the copies of the examination to the instructor on the date set for the examination.
7. Conducting all final examinations for courses taught by the faculty of their department/school. The Chair/Director must identify an alternate instructor-in-charge for final examinations where the course instructor is not available.
8. Providing examination attendance records to the instructor-in-charge for examinations not under the direction of Scheduling Services.
9. Inviting invigilators for examinations under the direction of Scheduling Services (2 invigilators for a class of 20-25 students and 1 additional invigilator for each additional 50 students in a class, thus a class of 125 students should have 4 invigilators).

Instructor’s Responsibilities
Instructors who wish to hold examinations in other than sit-down, regular formats should discuss procedures with their Chair/Director.

The faculty member(s) responsible for the course and the setting of the examination, or a designate, shall be the instructor(s)-in-charge for final examinations in that course. They are responsible for the following:
1. Including the time of the final examination on the course outline distributed to students at the commencement of the semester. Note that under normal circumstances, once established, the date, time and location of final examinations may not be changed (see Grading, Resolution 5), and that where a course is taught in multiple sections the final examination date and time will be the same for all sections regardless of location (see Grading, Resolution 7).
2. If it becomes necessary to change an examination time or to add a final examination, contacting Scheduling Services, and once a time is set, obtaining the written approval of all students.
3. Advising Scheduling Services, prior to the examination if an "open book" examination is to be written; otherwise, it will be considered "closed book".
4. Arriving at the examination room thirty minutes prior to the commencement of the examination and distributing examination papers, attendance cards, if used, and other authorized materials.
5. Taking attendance during the first hour of the examination period.
6. Arranging the collection of the completed examination papers and comparing the number of examinations collected to the number of attendance cards or student signatures collected. These records should be retained by the department for a period of one semester.
7. With his/her invigilators, ensuring that students do not enter the examination room after the first 60 minutes or leave during the first 60 or last 15 minutes of the examination period.
8. Including all instructions regarding the examination on the examination paper, i.e., writing on every other line, writing on the right hand pages of the book. No verbal instructions can be made at the examination hall with the exception of corrections to printed instructions and material.
9. Where a student does not write the final examination, following the procedures outlined under Academic Consideration in this section of the calendar.

Student’s Responsibilities
1. Students are advised that the Final Examination schedules are available for Fall Semester by mid-August, for Winter Semester by mid-December, and for Summer Semester by mid-April. Students are required to consult the final examination timetable in order to avoid conflicts in examination times when adding courses in subsequent Add periods. Students may not remain registered in courses with conflicting final examinations unless written approval is obtained from the dean or director and the instructors-in-charge of the courses. (Note that three examinations in 24 hours does not constitute an examination conflict. A conflict exists only where two examinations are scheduled into the same timeslot.)
2. ACADEMIC CONSIDERATION IS NOT GIVEN TO STUDENTS WHO MISREAD PUBLISHED TIMETABLES.
3. One week prior to the commencement of Final Examinations, the Final Examination location information will be posted in the Library, Athletic Centre, Office of Registrarial Services and on WebAdvisor. Students may also check their personal examination schedule on WebAdvisor by selecting “Class Schedule”, the current Term, and then “Exam Schedule Grid”.
4. Students in Distance Education courses who live more than 170 km from campus will write their final examinations at a selected off-campus examination site close to where they live. For further information, please contact Open Learning and Educational Support, 519-767-5000.
5. Students must be seated on entering the examination hall. Until at least 1 hour after commencement of the examination, no candidates shall be permitted to leave except under supervision. If a candidate is not present within the first hour of the commencement of the examination, the candidate shall not be permitted to write the examination.
6. No person shall be allowed in the examination hall during the course of examination except the candidates concerned and those supervising the examination.
7. No book, paper, or other aids shall be used during the examination except by permission of the instructor-in-charge. Students shall dispose of their bags and knapsacks by placing them on the floor beneath their chairs, and any books not classified as permissible aids shall be placed along the sides of the room.
8. Cell phones and pagers must be switched off and stored out of sight.
9. If provided, students must complete the examination attendance card at the beginning of the examination and place it beside their University of Guelph identification card at the front of the table. The attendance card will be signed at the time of collection.
10. Candidates shall not communicate with one another by writing, by signs, by words, or in any manner whatsoever while examinations are proceeding.
11. Students who have completed the examination will be allowed to leave their seats after the first hour has elapsed and after their examination books have been collected. To minimize the disturbance to students who have not yet completed their examinations, no student shall leave the examination hall during the last 15 minutes of the examination. At the conclusion of the examination period, students must remain seated until all papers have been collected and they are dismissed by the instructor-in-charge or, in the Athletic Centre, the Chief Invigilator.
12. When more than one book is handed in, students shall number each book and indicate on the cover of the first book the total number of books used.
13. No writing within the answer book or completion of computer answer sheets is permitted after the instruction to stop writing has been given. The instructor-in-charge may refuse to accept the paper of any candidate who fails to observe this time limit.

Registrar’s Responsibilities
The Final Examination Timetable, prepared by Scheduling Services is based on student course selections on file at the end of October (for Winter), March (for Summer), and July (for Fall). (Please note that for courses in which no students have registered by the time the data is downloaded, examinations cannot be centrally scheduled.) In the unusual circumstance that scheduling of final examinations by the Office of Registrarial Services results in an examination conflict for a student, the Examinations Coordinator in Scheduling, ORS, will contact the student, the course instructors on record, the relevant departmental examination coordinators and Program Counselor by email. Instructors will be asked to schedule an alternate examination time within the examination period for the student. Program Counselors and Scheduling will provide support to the instructors in determining an appropriate time for the re-scheduled examination. Resolution of the conflict will take place before the end of the Add period for the semester.
Distributing the "Final Exam Request Form" from Scheduling, to Chairs/Directors
the course is a required two-semester course that cannot be taken and completed
providing each instructor-in-charge with attendance cards
starting and ending examinations
In the event of a dispute over procedures during Final Examinations in the Athletic
The Chief Invigilator in the Athletic Centre is responsible for:
For Examinations held in the Athletic Centre shall be under the direction of the Office
the course is failed in the graduating semester (if a supplemental privilege is granted
by means of a letter of permission and tuition fees will be paid to the receiving institution
host institution.
Guelph courses and will be graded using the Outstanding/Pass/Fail format. Grades will
Courses taken on exchange will appear on the transcript as non-specific University of
Programs.
Students participating in exchange programs pay full-time tuition fees at their home
university, but select their courses at the university they will be visiting. The grades are
recorded there and forwarded to the home institution at the end of the semester or academic
eyear. Each institution participating in an exchange program designates a co-ordinator who
will be responsible for arranging the details of the exchange. Students are advised not to
leave on exchange without the written approval of the receiving university.
Students must pay their full-time fees and select their courses prior to leaving on exchange.
"Exchange Program Course Selection Request" forms are available at the Centre for
International Programs (C.I.P) Office or from Enrolment Services, Office of Registrarial
Services. Details on specific exchange programs can be found in Chapter V--International
Study. Courses taken on exchange will appear on the transcript as non-specific University of
Guelph courses and will be graded using the Outstanding/Pass/Fail format. Grades will be
determined by the Study Abroad Manager using an official transcript submitted by the
host institution.
Informal exchange programs where a formal agreement does not exist must be conducted
by means of a letter of permission and tuition fees will be paid to the receiving institution
(refer to Chapter VI--Schedule of Fees).

Failed Courses
In general, a student who is eligible for continuation of study in the program but has failed
to gain standing in one or more of the courses attempted will be required to repeat the
course(s) or take an alternative credit. Note: that a failed course attempt remains on the
student record even if the course has been repeated successfully. However, the University
recognizes that there may be cases where it is unreasonable for the student to repeat the
course to make up for the lost credit.
Therefore, the Academic Review Sub-Committee may, if appropriate and feasible, and
only under special circumstances, allow a student the opportunity to gain credit for a failed
course by granting a supplemental privilege.
The Academic Review Sub-Committees will consider granting a supplemental privilege
in the following special circumstances:
1. the course is failed in the graduating semester (if a supplemental privilege is granted
and successfully completed, convocation will most likely be deferred until the
following semester);
2. the failed course is not available to the student within the following three semesters,
or within a time period that includes the graduating semester;
3. the course is of such a nature that there is no permissible substitute or alternative
available to the student within the following three semesters, or within a time period
that includes the graduating semester; or
4. the course is a required two-semester course that cannot be taken and completed
within the following three semesters, or within a time period that includes the
graduating semester.
The original failing grade will remain on the student's academic record. A notation of "P"
or "OP" will be shown beside the original failing grade to show that a supplemental privilege
was granted and whether the outcome resulted in credit (P) or not (F).

Multiple Failure Limitations
Students should note that some programs limit the number of times a student may repeat
failed courses. A student may not be permitted to continue in his/her major and/or program
should they fail the same course, or its equivalent, multiple times. Multiple failure
limitations are noted in Program Requirements by Degree Program in Chapter X--Degree
Programs.

Grades

Grading System
Two-semester courses constitute two course attempts and will appear as such on the
student academic record. These courses are indivisible and the same grade will apply for
each attempt. A refined grading system was approved by Senate on May 21, 1991 effective
Spring 1992 as follows:

Grading System

Letter Grade | Percentage
---|---
A+ | 90-100
A | 85-89
A- | 80-84
B+ | 77-79
B | 73-76
B- | 70-72
C+ | 67-69
C | 63-66
C- | 60-62
D+ | 57-59
D | 53-56
D- | 50-52
F | 0-49

Courses taken on exchange are graded using the Outstanding/Pass/Fail alternate grading
system (refer to Exchanges, Chapter V--Special Study Opportunities; Exchanges). In addition, selected University of Guelph courses, approved by the Board of Undergraduate
Studies, will use these alternate grading system.

Alternate Grading System

Alternate Grading System

Grade | Definition
---|---
OP | Outstanding (Pass)
P | Pass
F | Fail

---

2019-2020 Undergraduate Calendar
VIII. Undergraduate Degree Regulations and Procedures, Grades

Other Grade Notations

<table>
<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUD</td>
<td>Audit</td>
</tr>
<tr>
<td>CRD</td>
<td>Credit</td>
</tr>
<tr>
<td>DEF</td>
<td>Deferred Privilege</td>
</tr>
<tr>
<td>INC</td>
<td>Incomplete</td>
</tr>
<tr>
<td>INP</td>
<td>In Progress</td>
</tr>
<tr>
<td>MNR</td>
<td>Mark Not Received</td>
</tr>
<tr>
<td>WF</td>
<td>Withdrawn with Failure</td>
</tr>
<tr>
<td>XXF</td>
<td>Supplemental Privilege Failed (XX denotes the original failing grade)</td>
</tr>
<tr>
<td>XXP</td>
<td>Supplemental Privilege Passed (XX denotes the original failing grade)</td>
</tr>
</tbody>
</table>

Grading Procedures

Feedback to students on work completed or in progress is an integral part of teaching and learning in that it allows students to measure their understanding of material and their progress on learning objectives. Feedback often goes beyond grading—an indication of the standard achieved—to include comments on the particular strengths and weaknesses of a student's performance. While the nature and frequency of such feedback will vary with the course, the University of Guelph is committed to providing students with appropriate and timely feedback on their work. Instructors must provide meaningful and constructive feedback prior to the 40th class day. This may include but is not exclusive to returning papers, assignments, in-class or laboratory quizzes, laboratory reports, or midterm examinations prior to the 40th class day. In research and independent study courses, instructors must provide students with a realistic idea of their performance by discussing progress directly with the student and, if necessary, identify specific areas for improvement. This may include the assessment of a research plan, literature review, annotated bibliography, oral presentation or other assessment tools.

Resolution 1
That the assignment of grades at the University of Guelph be based on clearly defined standards, which are to be published in the Undergraduate Calendar for the benefit of faculty and students and that the definitions for each of the numerical grade range (letter grades) be as follows:

80 - 100 (A) Excellent. An outstanding performance in which the student demonstrates a superior grasp of the subject matter, and an ability to organize, examine the material in a critical and constructive manner. The student demonstrates a high degree of creative and/or logical thinking, a superior ability to organize, to analyze, and to integrate ideas, and a thorough familiarity with the appropriate literature and techniques.

70 - 79 (B) Good. A more than adequate performance in which the student demonstrates a thorough grasp of the subject matter, and an ability to organize and examine the material in a critical and constructive manner. The student demonstrates a good understanding of the relevant issues and a familiarity with the appropriate literature and techniques.

60 - 69 (C) Acceptable. An adequate performance in which the student demonstrates a generally adequate grasp of the subject matter and a moderate ability to examine the material in a critical and constructive manner. The student displays an adequate understanding of the relevant issues, and a general familiarity with the appropriate literature and techniques.

50 - 59 (D) Minimally Acceptable. A barely adequate performance in which the student demonstrates a familiarity with the subject matter, but whose attempts to examine the material in a critical and constructive manner are only partially successful. The student displays some understanding of the relevant issues, and some familiarity with the appropriate literature and techniques.

0 - 49 (F) Fail. An inadequate performance.

Resolution 2
That instructors must use evaluation criteria which measure quality of performance and not merely activity. Unannounced evaluations or surprise assessments may not be used for course assessment purposes or to determine course grades.

Resolution 3
That instructors are not to use predetermined, arbitrary distributions in the assignment of grades in individual courses.

Resolution 4
Part A
That, by the start of the course selection period for the semester in which the course will be offered, instructors will provide a course description for posting to the department web site. This course description shall include a brief summary of the course topics and requirements, the general format of the course, and the methods of evaluation.

Part B
That, by the first class meeting of the course (by the end of the first week of classes for distance education courses), the instructor must provide students with a written course outline. The course outline may be distributed either a) in class or b) electronically via the official course website on CourseLink and must include a detailed description of course requirements, the methods of evaluation, and the timing of the evaluations.

Resolution 5
That the methods and/or timing of evaluation as indicated on the course outline should not be changed after the first class meeting except under strictly adhered to conditions. Notice of proposed change and of the class at which consent is to be sought, must be given at a previously scheduled class. Where the change is supported by the instructor and is consistent with University policies and procedures such change may be enacted with the unanimous consent of students. If unanimous consent of the students has not been obtained, the change may be enacted only with the approval of the chair of the department and only if alternative and equitable accommodation is available to students opposed to the change.

Resolution 6
That all term tests, assignments, laboratory reports, etc., should be returned to, or discussed with students, without undue delay and in any case before the last day of the examination period. If the material is necessary for the preparation of the final examination, it must be returned or discussed as soon as possible and in any case no later than three days before the examination.

Resolution 7
It is recognized that multiple sections of the same course may differ in terms of texts and other academic resource materials, teaching methods and formats, and evaluation procedures used. However, the department is responsible for ensuring that the different sections are achieving common learning objectives with a common set of academic standards and expectations. The department chair is responsible for ensuring the consistency of final grade distribution across sections over time. Where a course has more than one section writing a final examination, the examination date and time will be the same for all sections.

Resolution 8
That each department must keep under continual review its grading procedures and matters that relate to academic standards to make sure the University's policies are being applied.

Resolution 9
That normally all courses at the 1000 and 2000 levels shall have final examinations and that exceptions require the approval of the Chair of the Department.

The Board of Undergraduate Studies has by formal resolution undertaken to do as follows:

- to specify clearly the administrative responsibility of chairs with respect to the methods of evaluation, the setting of examinations and the determining of grades in courses in their departments.
- to review the effects of the pass by course system on the academic standards of the University.
- to request each program to review its overall academic standards and, in particular, its requirements for graduation.
- to examine whether the prerequisites at the secondary school level required for admission to the University of Guelph are adequate.
- from time to time, to review and monitor the academic standards across the University to ensure that there is consistency and that the regulations of the University are being adhered to.

Resolution 10
Senate resolved on June 21, 1977 that in determining grades for written assignments the instructor should take into consideration the student's ability to use correctly and effectively the language appropriate to the assignment.

Resolution 11
Senate resolved on March 21, 1978 that the chair should review, prior to the commencement of classes, the manner in which a faculty member intends to conduct a course and to determine final grades. If the chair disagrees with the faculty member's intention or subsequently with the implementation of the stated intentions, the chair will discuss his/her concerns with the faculty member. If agreement cannot be reached, the matter will be referred to an appropriate department committee which will advise the chair in reaching his/her decision. The advice may include a recommendation on examination procedures.
Submission of Final Grades

General Information
Enrolment Services, Office of Registrarial Services, distributes the "Grades Due Report" forms to the departments one week prior to the examinations period for the semester. The "Grades Due Report" specifies the deadline date for submission of grades to Enrolment Services, Office of Registrarial Services.

Instructor's Responsibilities
The instructor (department) is to retain all final examination papers and term assessments not returned to students for a period of one semester. The "Grades Due Report" form distributed by Enrolment Services, Office of Registrarial Services, will carry the due date for grades for each course section. The due dates are established in accordance with the regulations of the Senate.

Grades must be submitted to Enrolment Services by the deadline stated on the "Grades Due Report". The early submission of grades will assist in their processing. Grades that are not received prior to the release of student grades are reported as "MNR" (mark not received).

Class lists are updated regularly on the Class List Web-site for departmental download. Lists downloaded from the Class List Web-site list all officially registered students in a class. The department must explain any changes to the list, e.g. in the case of:

1. A student whose name is not on the list, but who has been attending class.
2. A student whose name appears on the list, but for whom the instructor has no record.

Instructors must not grant an extension of time to any student beyond the final date for submission of grades for that course. Instructors must report students who do not satisfy course requirements by assigning a grade of "INC" and noting incomplete work on an Incomplete Coursework Form.

Incomplete Coursework Form
Instructors should only submit grades for students who have completed their final work for a course. If a student does not complete a final examination or final assignment, the instructor must enter "INC" (incomplete) on the "Grade Report" form and complete an Incomplete Coursework Form for the student. The Incomplete Coursework Form is available from the chair of the department. Departments must submit the Incomplete Coursework Form(s) along with the "Grade Report" form to Enrolment Services, Office of Registrarial Services. The Academic Review Sub-Committee will contact the faculty and/or department chairs at the time of meetings if this procedure is not followed. The Incomplete Coursework Form assists the members of the Academic Review Sub-Committee in making their decision. The instructor must complete all sections of the form for each student reported.

Student's Responsibilities
Students must have all final assignments completed and submitted to instructors by the deadline dates indicated in the course outline. Instructors cannot grant extensions beyond the deadline for submission of grades. Students who are unable to satisfy the submission deadlines established by the instructor and who wish special consideration for medical, psychological or compassionate reasons should request academic consideration.

Department Chair's Responsibilities
The chair of the department signs student grades in the designated area on the "Grade Report" form. The department chair's signature indicates that he/she believes that the grades for that course adhere to the academic regulations of Senate. If the chair has reason to believe that the academic regulations of Senate have not been adhered to, he/she will consult with the faculty member and, if necessary, the college dean. If the chair, after such consultation, still believes that the academic regulations of Senate have not been adhered to, he/she must submit the grades without approval through the college dean to the Provost and Vice-President (Academic). The grades must be accompanied by a complete report. The Provost and Vice-President (Academic) will act to ensure that the academic regulations of Senate are adhered to.

The department chair should be available for consultation during the meetings of the Academic Review Sub-Committees.

The Board of Undergraduate Studies strongly encourages each chair, at his/her discretion, to conduct a periodic review of the methods of assessment, class averages, distribution of grades and failure rates in courses offered by that department to ensure that grade abuse does not occur (refer to Final Grades).

Program Counsellor's Responsibilities
The program counsellor reviews the list of "INC" (incomplete) courses, matching medical documentation, requests for academic consideration, and counselling files (refer to Deferred Privileges). The program counsellor in conjunction with the Academic Review Sub-Committee assigns deferred privileges where appropriate and forwards decisions to Enrolment Services, Office of Registrarial Services.

Registrar's Responsibilities
Enrolment Services records the examination results; notifies students of their grades via WebAdvisor; notifies program counsellors of incomplete grades; and records deferred privilege decisions.

Release of Final Grades
University grades are official on the day that they are issued to students. It is the responsibility of the Office of Registrarial Services to release the grades to the student and to record the grades on the student's official University transcript.

All grades are available through WebAdvisor. Students who require an official copy of their grade report can request an official transcript upon payment of the transcript fee.

Grades for students who have been advised by Student Financial Services, Office of Registrarial Services, that they are on academic sanction will not be released by Enrolment Services until notification/authorization is received indicating that the account has been cleared to the satisfaction of Student Financial Services. To receive grades, students must clear their sanction by the last day of classes.

Summer Session grades are released approximately two weeks after the conclusion of examinations. The grades and the continuation of study status are considered to be unofficial until the end of the Summer Semester.

Grade Reassessment
Grade re-assessment is the process of reviewing the calculation of grades, or the methods and criteria used to establish final grades for a student in a course or misapplication of an academic regulation. The outcome of a grade re-assessment may be a grade increase, a grade decrease, or no change to the grade. The detection of errors or omissions in the calculation of final grades will result in the assignment of a revised grade. Students normally initiate grade re-assessments, but instructors may initiate this process. However, instructors must NOT use the grade re-assessment process to:

• grant extensions for submission of work beyond course grade submission deadline
• change the student's continuation of study status
• improve the student's program or specialization average
• submit late grades

Calculation Errors or Omissions
Students who believe there have been errors or omissions in the calculation of their final grade for a course may request a grade reassessment. They must submit a request in writing to the chair of the department offering the course no later than the 10th class day of the subsequent semester. The request must pertain to work completed during the semester. Students must also submit relevant assignments or tests that have been returned to them.

The chair shall forward the student's request to the instructor and the instructor shall respond to the chair within five class days. The instructor has the responsibility of ensuring that the calculation and totalling of marks is accurate. The instructor must reply to the chair, in writing, giving assurance that the review is complete.

Where there is a change in the grade, the chair signs the "Grade Reassessment" form and forwards it to Enrolment Services, Office of Registrarial Services. The Office of Registrarial Services will advise the student in writing of the change of grade. If there is no change to the grade, it is the chair's responsibility to inform the student in writing.

Methods or Criteria Used in Establishing Final Grades
A student may request a grade re-assessment on the basis of the Methods or Criteria used in establishing the final grades in a course. Methods or Criteria is defined as the application of the assessment expectations, the assessment mechanisms and the grading standards as provided in the course outline, assignment sheets, and any associated grading rubrics used in the course. The assessment of work must always be based on the criteria that are established in those documents. If the student believes that the methods and criteria provided by the instructor do not comply with the grading procedures established by Senate, the grade re-assessment request may fall more appropriately under the procedures for Misapplication of an Academic Regulation (see below). Students unsure of which grade re-assessment process to follow, should seek advice from the Chair/Director, their program counselling office or Student Judicial Services in the University Secretariat.

Students who have evidence the Methods or Criteria, as established by the course outline, assignment sheets, or any associated grading rubrics for the course, have been applied by the instructor in an unreasonable, biased, or inconsistent fashion, may request the Chair/Director initiate a grade reassessment. The Chair/Director shall review the grading of any assignment under question. Options in the course of the review include: a) leaving the grade unchanged, b) increase the grade, or c) lower the grade.

Procedures for conduct of the grade reassessment
1. Students who have evidence the methods or criteria have been applied by the instructor in an unreasonable, biased or inconsistent fashion should discuss their concern with the instructor in writing (via email) as soon as possible and no later than the 10th class day of the subsequent semester.
2. If the concern is not addressed and/or under review within five working days, the student may submit the request in writing to the Chair/Director. The request should be submitted as soon as possible. The request must state the reasons for the request, demonstrate clear bias, unreasonable, or inconsistency and include supplemental documentation (copy of the assignment(s) in question, email correspondence if relevant, etc.)
3. The Chair/Director reviews the course outline, assignment sheets and associated rubrics and requests the instructor to document the methods and criteria employed in grading the assignment in question and respond to the student’s concerns in writing to the Chair.

4. The Chair/Director reviews the matter with the instructor and the student independently and determines whether there is sufficient evidence to reasonably support a finding that the methods or criteria have been applied by the instructor in an unreasonable, biased or inconsistent fashion and, if so, whether a mutually agreeable solution can be achieved. If the request from the student does not meet this standard, the Chair/Director informs the student that the request is denied. The student has the right to appeal the decision of the Chair/Director to the Senate Committee on Student Petitions.

5. If resolved in Step 4, the Chair/Director informs the student and faculty member of the grade change in writing via email and submits an Undergraduate Grade Change form to the Office of Registrarial Services (ORS).

6. If a resolution cannot be obtained through Step 4 and the Chair/Director agrees the student request meets the standard set out in section 4 above, the Chair/Director initiates an independent assessment of the assignment by choosing a neutral assessor from the faculty members of their department/school or a faculty member from another department/school with sufficient expertise to assess the assignment under review.

7. The Chair/Director provides the neutral assessor with a clean/ungraded copy of the assignment, the course outline, assignment sheets and associated grading rubrics.

8. Based on the material provided by the student, the faculty member, and any independent assessor, the Chair/Director shall determine whether or not the methods and criteria employed were appropriate and will also determine whether or not the student’s grade will change.

9. The Chair/Director communicates the decision to both the student and the Faculty member in writing via email and if there is a change to the final grade, the Chair/Director submits an Undergraduate Grade Change form to the Office of Registrarial Services.

10. The student has the right to appeal the decision of the Chair/Director to the Senate Committee on Student Petitions.

**Misapplication of an Academic Regulation or Procedure**

A student may make a request for a grade reassessment of their final grade in a course if they believe that there has been a misapplication of an academic regulation or procedure in the course. “Misapplication” refers to situations where an instructor has not followed the grading procedures established by Senate. Academic regulations and procedures pertaining to grades can be found in the subsection of the ‘Grades’ section entitled ‘Grading Procedures’.

**Procedures**

1. Students who believe that the misapplication of an academic regulation or procedure has affected or will affect the final grade in the course should discuss their concern with the instructor in writing (via email) as soon as possible and no later than the 10th class day of the subsequent semester.

2. If the concern is not resolved within 5 working days, the student may submit a complaint in writing to the Chair/Director of the department offering the course. The complaint should state the reasons for the request and include available supplemental documentation (copy of the assignment(s) in question, copy of information posted to the course website, email correspondence if relevant, etc.)

3. If the Chair/Director has reason to believe that the instructor has not adhered to the grading procedures established by Senate or other academic regulations of Senate, the Chair/Director should consult with the faculty member and the Associate Dean (Academic) for the college.

4. The Chair/Director and Associate Dean (Academic) determine the remedy, based on consultation. This type of grade reassessment may require additional consultation with the Dean and/or the Office of the Associate Vice-President (Academic) to determine an appropriate remedy.

5. The Chair/Director notifies the student bringing the request, and any other affected students, in writing (via email). If the remedy affects the entire class, the information is also posted to the course website and a communication plan may be required.

6. Ultimately, the Provost and Vice President (Academic) may have to take the necessary action to ensure compliance with the academic regulations of Senate.

7. The remedy established by the Dean and in consultation with the administrators identified above is not subject to review by the Senate Committee on Student Petitions.

**Graduate Courses**

Graduate courses taken by undergraduate students will not normally be credited to a graduate program at the University of Guelph. If the graduate course is used for credit toward any undergraduate program requirement, it cannot be considered subsequently for credit toward a graduate degree at the University.

Graduate courses taken while registered in the Faculty of Graduate Studies cannot be used toward a baccalaureate degree program.
B. Certificate and Diploma Programs
To be granted a Certificate or Diploma, the conditions outlined in Chapter XI–Certificates and Diplomas must be satisfied using the calendar that is in effect at the time of admission to the General Studies program or the Non-Degree category, or at the time of declaration of the Certificate or Diploma. Students who are granted a Certificate or Diploma do not convocate, but have the designation shown on their OpenEd transcript.

C. Procedures
Student’s Responsibilities
A student must submit a formal application in order to be considered as a candidate for a degree or diploma at a specific convocation. There are three convocation periods throughout the year– early October, mid-February, and early June. An application for graduation must be submitted by the student no later than the deadline for the specific convocation period as specified in Chapter III–Schedule of Dates. Late applications will be accepted with the submission of a late fee (refer to Chapter VI–Schedule of Fees). Following submission of the application to graduate, the student will receive confirmation of the application, along with information on subsequent procedures. An additional late fee will be assessed in those cases where changes are requested by the student after the deadline date as this will affect the printing of the degree/diploma parchment.

Although the Office of Registrarial Services will attempt to send an email to every potential graduate inviting them to apply to graduate via WebAdvisor for Students (My Application for Graduation), it is the student’s responsibility to ensure that they submit their application for graduation by the published deadline dates in Chapter III–Schedule of Dates. Specific applications details are as follows:

Application for a Certificate or Diploma
A student who is registered in the General Studies program or the non-degree program and who expects to complete the requirements as set down in Chapter XI of the calendar for one of the certificate or diploma programs, should contact the Open Learning and Educational Support.

Application for Graduation from Degree Programs
An email inviting students to apply to graduate via WebAdvisor for students (My Application for Graduation) will be sent to each student registered in a general degree program when his/her completed plus in progress credits equal 15.00 credits or more; and to students registered in an honours degree program when their completed plus in progress credits equal 20.00 credits or more. All other students with an active academic program who wish to apply to graduate may access ‘My Application for Graduation’ on WebAdvisor for Students.

Students who are not currently active students must submit a hard-copy Application for Graduation form, accompanied by the appropriate fee. This application form and instructions for the completion of the application are available at http://www.uoguelph.ca/regweb/publications/index.shtml.

It is the responsibility of the student to submit the completed form prior to the published deadline date.

Application for Honours Equivalent
A student who is registered in an honours equivalent program who expects to complete the requirements as set down in the calendar for one of the honours programs, should submit an “Application for Completion of Honours Equivalent” form available from the Undergraduate Graduation and Convocation Coordinator, Enrolment Services, Office of Registrarial Services. The same deadlines for applications to graduate apply to the applications for honours equivalent.

Chair’s Responsibilities
The department chair receives both the Academic Evaluations for all students who have applied for a degree with a specialization administered by that department and a listing of those students. The department chair (or designate) must review these records to determine if each student has satisfied:
1. general University requirements.
2. overall program requirements and
3. specialization requirements.
Each check is to be reported on the form supplied, and the form is to be forwarded to the program counsellor by the date specified on the accompanying memorandum. If an applicant satisfies the requirements for the degree, or diploma sought, Registrarial Services will report the name of the student to the Registrar. If an applicant fails to satisfy any requirement(s), Registrarial Services will inform the student of that decision.

Registrar’s Responsibilities
Enrolment Services, Office of Registrarial Services initiates an "Application for Graduation" process for the appropriate group of regular and special students. Enrolment Services processes those applications received prior to the deadline and forwards a confirmation of both the receipt of the application and the information supplied by the student and advises students of the date and time of the convocation ceremonies.
Enrolment Services forwards Academic Evaluation and check sheets to department chairs to obtain decisions on eligibility of the applicants. Enrolment Services informs students not approved by the departments of the rejection and the reasons for it.

The Undergraduate Graduation and Convocation Coordinator will present a list of all recommended graduands to the Registrar for approval.

D. Standing on Graduation
Standing on graduation is noted on the transcript for graduates as follows:
- Degree with Distinction - Cumulative average of 80% or higher.
- Degree with Honours - Cumulative average of 70-79%.
- Degree with Standing - Cumulative average of less than 70%.
Standing is only based on the internal University of Guelph academic record. For the DVM Program standing on graduation is based on the average of the marks received for those courses completed after admission to the program. Graduation standing is noted on the student’s official transcript after graduation has taken place. The standing is not printed on the student’s parchment.

E. Notation on Transcript
Official transcripts from the University of Guelph will not show that a degree has been conferred until after the convocation.

Confirmation of Enrolment (not for OSAP)
A student who requires a letter confirming attendance at the University in a given semester should complete the Confirmation of Enrolment/Attendance Order Form through the Forms and Documents site found at: Downloads

Letters of Confirmation of Graduation
A student who requires a letter confirming graduation from the University should make this request to the Undergraduate Graduation and Convocation Coordinator, Enrolment Services, Office of Registrarial Services.

Letters of Permission
A student at the University of Guelph who wishes to enrol in a course for credit at another institution and have that course considered as a credit toward a University of Guelph degree must complete a "Request for Letter of Permission" form and obtain the appropriate approvals as indicated on the request form, prior to applying for admission to the other institution. The form is available in program counselling offices, at Enrolment Services and online at https://www.uoguelph.ca/Registrar/downloads.

Credit for successful completion of such courses will be granted at the University of Guelph if an appropriately-completed and signed Request for Letter of Permission form has been presented to the Office of Registrarial Services, Enrolment Services prior to the student's enrolment at the other institution. A student taking a course on a Letter of Permission is responsible for ensuring that the other institution forwards the official transcripts directly to Enrolment Services, Office of Registrarial Services. If the transcript for the course taken on a Letter of Permission is not received by the 20th class day of the semester following completion of the course, a grade of "F" will be entered on the student's internal academic record.

Students are required to complete the courses specified on the Request for Letter of Permission form during the semester(s) specified on the form. If the student registers in additional semesters or courses that are not approved by the University of Guelph, the student may need to apply for readmission. The student should speak with their program counsellor should they find themselves in this situation.
Withdrawals or non-registration in courses taken on a Letter of Permission must be verified by official documentation from the other institution. Any changes in the courses taken must have the appropriate program counsellor approval from the University of Guelph.

All courses for which Letters of Permission have been granted will be included in all the student’s internal academic records. The specific courses will not be listed on the official transcript of the University of Guelph but the name of the host institution and the total number of credits taken will be listed. Note that courses taken on Letter of Permission for which a grade of F has been either assigned or achieved will be listed as 0.00 credit. Courses taken on a Letter of Permission will not count in the student’s semester average or the student’s cumulative average.

Students do not normally qualify for a letter of permission in the final semester of their degree program.

Caution: when selecting courses to take on Letter of Permission you should be aware that you may not be able to get into the courses selected. For instance, courses may be full, may have been removed from the schedule, or may conflict with other courses. For this reason, you are encouraged to select more courses than needed but indicate clearly on the Request for Letter of Permission form the number of courses that will be taken. If you need to take a course not listed on the form, you should make every effort to contact your program counsellor in advance of registering in another course in order to obtain approval for the equivalent credit. Departments reserve the right to deny credit equivalency to a course taken without prior approval.
Priority Access Courses

In cases where enrolment demand habitually exceeds course capacity and there is demonstrated need to restrict access to a particular cohort of students on a priority basis, departments may request the implementation of course restriction rules to ensure priority access to the appropriate student group(s) during the course selection process. The system will provide a message at the time of course selection for students who do not meet the enrolment criteria. In special cases the department may override the restriction by authorizing entry to the course with a signature on a “Course Waiver Request” form using the “Course Restriction Waiver” box.

Departmental requests for course restriction rules must be directed to the Curriculum Manager who will determine if the request is acceptable and will then work with the department or school to develop the appropriate enrolment criteria and confirm that the restriction can be monitored. In general, course restrictions should be clearly defined in the calendar course listings so that students are advised in advance of the intended audience for the course.

New restrictions or changes to existing restrictions must be approved prior to the course selection period in which they are to be implemented.

Prior Learning Assessment

Prior Learning Assessment (P.L.A.) is a mechanism whereby students who have acquired substantial experience in a non-traditional environment have an opportunity to challenge whether such learning is equivalent to a course(s) offered at the University. Note: P.L.A. will only be available to a student if sufficient evidence is provided that the course material was acquired outside a degree program at a University. A request to challenge a course that has already been attempted at university will not normally be granted.

P.L.A. is not open to students who simply wish to challenge a course. Students will be required to sign a contract stating that the learning occurred other than in a university course. Not all courses are appropriate for challenge. Each department has the responsibility of determining which of its courses may be subject to a P.L.A. challenge. The challenge process could include one or more assessment methods, including standardized tests, written and/or oral examinations, performance evaluations, interviews, and portfolio assessment. All these assessments require that the individual demonstrate, to a qualified faculty member(s), that pre-determined knowledge and skills have been acquired.

The maximum number of credits a student can challenge is 5.00 for degree programs, or 30% of the certificate requirement for open learners. Credits acquired through P.L.A. will be assigned credit status (CRD) and will be on the official transcript. Students wishing to challenge a course(s) should contact Enrolment Services to obtain an application form. A request must include a clear statement as to the course(s) the student wishes to challenge, an explanation of how the knowledge necessary for the course was gained, and any relevant supporting documentation to validate the claim. Requests will be forwarded to the appropriate department(s) for evaluation. Upon receipt of the response from all the departments concerned, Enrolment Services will inform the student which, if any, courses have been approved for challenge.

If a challenge has been granted, the department will determine the nature of the assessment and the deadline by which time the work must be complete. It is the student’s responsibility to contact the department with respect to the details of the assessment within three weeks of being informed by Enrolment Services of being granted the privilege. Upon completion of the assigned task(s), the department will inform the Office of Registrarial Services as to the student's success or failure of the challenge.

Those students (a) whose application for a challenge is reviewed by the faculty members of the department concerned, and who are subsequently denied the opportunity to challenge, or (b) who fail a challenge examination, may appeal the decision first to the chair of the department, and subsequently, if necessary, to the dean of the college.

Chapter VI—Schedule of Fees - outlines the applicable fees for Prior Learning Assessment.

Readmission

Previously registered students must apply to Admission Services for readmission under any of the following conditions:

1. If they were required to withdraw from their program for a period of two or more semesters.
2. If they were suspended from the University for academic misconduct.
3. If they have graduated from this University and wish to register in order to take additional courses.
4. If they registered in a program at another post-secondary institution and wish to return to the University of Guelph.
5. If they have not registered at the University of Guelph for six or more consecutive semesters.
6. If they are attending the University of Guelph on a letter of permission and wish to continue past the term of the letter of permission agreement.

Readmission to a program at the University of Guelph is not automatic. Students who are required to withdraw must apply for readmission to the University after completing the minimum two semesters of rustication. Students should consult Chapter IV - Admission Information regarding appropriate admission requirements and deadline dates. Applications for readmission should include a statement which outlines the basis for readmission. Criteria used for readmission may differ by academic program. Students considering readmission should consult with the appropriate program counsellor regarding procedures and criteria for readmission to that program.

Students requiring readmission must apply to Admission Services, Office of Registrarial Services, University Centre, Level 3. Applications for readmission must be submitted by the deadline date established for each semester (see Chapter III—Schedule of Dates). An application fee is payable at the time the application is submitted (see Chapter VI—Schedule of Fees).

On December 19, 1995, the University Senate approved the following policy for the granting of credit while on rustication:

1. Students who have been required to withdraw, and who take university credit courses during their rustication period, will be eligible for up to 1.00 credit provided they meet the criteria for readmission and the criteria for the transfer of credit. Students registered for courses through the Open Learning Program, are not permitted to attend courses on campus.
2. Students who take university courses after the two-semester rustication period may transfer all these credits provided the student meets the criteria for readmission and the criteria for the transfer of credit.
3. Students who have been suspended for academic misconduct will not receive any credit for courses taken during the suspension period.

Note: This policy applies to any university credit course taken during the rustication period.

Registration

A student is considered as registered for a particular semester only when courses to be attempted for that semester have been reported to the Registrar no later than the end of the add period and financial arrangements, satisfactory to Student Financial Services, have been made for the associated tuition and other fees. Coincident with the registration process, students may complete other business arrangements with the University such as reporting of address information, residence payments, meal card contracts, parking permits, and receipt of identification cards. The University reserves the right to disallow registration until all deferred privileges are complete and the student’s final standing is calculated.

In-Course Students

All in-course students must complete the registration procedures prior to the deadline dates as published in Chapter III—Schedule of Dates.

While advance billings will be available on WebAdvisor, to students who have indicated an intention to register in a particular semester, it is the responsibility of all in-course and returning students to ensure that satisfactory arrangements are made with Student Financial Services prior to the deadline. Students who have not received the advance billing should contact Student Financial Services in order to make payment. Arrangements for registration after the deadline date will be assessed an additional late registration fee.

Students who are readmitted will be advised of registration procedures. Questions should be directed to Enrolment Services, Office of Registrarial Services.

Note: In-course students who complete the registration procedures are advised that this registration is conditional on their eligibility for continuation of study into that semester. A student who is required to withdraw will not be allowed to attend classes, the registration will be cancelled and an appropriate adjustment automatically will be applied to the student's account (see also—Withdrawal). The University reserves the right to disallow registration until all deferred privileges are complete and the student’s final standing is calculated.

The procedure is as follows:

1. Approximately 2-3 weeks before the deadline, a billing statement is available on WebAdvisor, to students who have selected courses.
2. Students must make payment to Student Financial Services by the deadline. Payments received after the deadline will be assessed a late registration fee.

General System In-course Students (Fees)

The registration procedure is conducted through WebAdvisor. The registration procedure will allow all in course students to complete their financial arrangements with Student Financial Services before the upcoming semester. The billing form will reflect the course selection data, also your accommodation and meal plan status if available, and is to be returned with suitable arrangement to Student Financial Services. The deadline for payment is indicated in Chapter III—Schedule of Dates. Failure to meet the deadlines will result in an additional fee adjustment. Mailings by the University will be made to the University email account, the on-campus P.O. Box, and/or the mailing/home address per the University’s student address policy.
Registration is conditional on being eligible to continue in your program of study. Students who are required to withdraw will not be allowed to attend classes as their registration will be cancelled immediately and a full refund of fees will be made as soon as possible. Students required to withdraw who subsequently are re-admitted or who transfer to another program or who become eligible to proceed through appeal must report to Enrolment Services, Office of Registrarial Services to have their registration status confirmed and add their courses.

Registration may be completed by one of the following methods:

- On receipt of payment. **DO NOT SEND CASH IN THE MAIL**
- An approved “Staff Registration and Tuition Waiver Request” form (for qualified full-time University employees only).

**PAYMENTS RECEIVED THROUGH THE MAIL MUST BE POST-MARKED ON THE DEADLINE DATE OR EARLIER TO AVOID THE ASSESSMENT OF A LATE REGISTRATION FEE.**

### Parking Payments

Students wishing to pay for a parking permit are asked to include the appropriate payment in accordance with the schedule in Chapter VI--Schedule of Fees with their total payment submission. Students who comply with this procedure will receive their parking permit in the mail prior to the commencement of classes.

### Changes to Preprinted Calculations

Students who have changed their mind concerning the number of credits they wish to take are advised to write the correct amount on the billing form. Please refer to the fee schedule included with your billing form.

Changes to residences calculation, including meal plans, must be cleared through the Student Housing Services or Hospitality Services.

### Cancellation/Withdrawal Procedure

If a student has made payment arrangements and wishes to cancel their semester registration before the first day of classes they must drop all their courses via WebAdvisor. If the student is unable to access WebAdvisor they must send an email, which includes their student ID number, from their @uoguelph.ca account to Office of Registrarial Services, Enrolment Services at es@uoguelph.ca asking to have their semester registration cancelled. The cancellation of the courses prior to the first day of the classes will generate the appropriate refund.

Students are advised that there is a withdrawal procedure in effect as of the first day of classes (see Withdrawal). Students will be liable for fees payable in accordance with the refund schedule (see Chapter VI--Schedule of Fees regarding Refunds).

Once the payment has been submitted, **please do not put a stop payment on your cheque.** This does not constitute cancellation and will only result in a cheque refusal fine being charged.

### Late Registration

Students who do not register by the time designated as the registration deadline for the semester in question are subject to additional fee adjustments. Exceptions will only be made for acceptable reasons with documented evidence. **The fee schedule for late registration is published in Chapter VI--Schedule of Fees. A student will not normally be allowed to register after the end of the Add Period. Appeals against the additional fee adjustments must be made in writing to the Secretary of the Appeals Committee, by contacting the Enrolment Services, Office of Registrarial Services within 10 class days of the commencement of classes. Appeal forms are available from Enrolment Services.**

### Department Chair’s and Dean’s Responsibilities (New Student Registration Only)

In the event that new students will be delayed for registration because of University sponsored trips or courses the department chair concerned should forward a list of participating students to the dean/director of the college/school for approval. The approval list should then be forwarded to the Associate Registrar, Enrolment Services, and specific procedures for late registration will be arranged.

### Research Projects

The University of Guelph is committed to providing undergraduate/associate diploma students with opportunities to engage in original research projects, including the opportunity to engage in independent study options, conducted under the supervision of a faculty member and involving the student pursuing original research. These projects might take a range of forms, as appropriate to the student’s course of study. A student wishing to pursue an independent research project should consult with the academic advisor for the program or the coordinator of the course in which the project will be undertaken. The advisor/coordinator can provide guidance about undertaking these projects including regulations concerning independent research projects specific to the program and/or department/college. Members of faculty who undertake the supervision of independent research projects assume the responsibility of ensuring that the project complies with regulations, policies and procedures. The successful completion of an independent research project often depends on significant preparation in advance, involving collaboration and agreement between the student and their supervisor. This includes establishing a description of the project, and a scheme of grading, as well as deadlines for the submission of work. A student should plan their project a least a semester before the formal undertaking of the project.

Further, the instructor and student should ensure that if the project involves the human participants, or the use of live animals, the project has appropriate approval from the Research Ethics Board (http://www.uoguelph.ca/research/humanParticipants/), or the Animal Care Committee (http://www.uoguelph.ca/research/acs/), as appropriate. The preparation of the documentation required for approval by the Research Ethics Board or the Animal Care Committee takes several weeks. In accordance with the Canadian Council on Animal Care, anyone who is handling animals for purposes of teaching or research must have appropriate training which is provided by the University of Guelph.

When a project involves risk—including handling dangerous materials—the supervisor (and student, as appropriate) should consult with Occupational Health and Safety to ensure compliance with standards of health and safety.

A student whose independent research project involves international travel must consult with the staff in the Centre for International Programs (http://www.uoguelph.ca/CIP) to ensure that they have completed the University’s mandatory pre-departure orientation in order to be prepared appropriately to travel outside Canada.

### Schedule of Studies

If students have not done so upon entering a degree program, they must declare a major by entry into semester 3 of their degree program. The University monitors the student's progress toward a degree using both the degree program requirements and the schedule of studies requirements. Students must satisfy the requirements in effect at the time of the initial declaration of a schedule of studies or at the time of any subsequent change in declarations. When degree program requirements or schedules of studies are altered by the University, a student may elect to satisfy the requirements in effect when the student entered the degree program, or its equivalent, or a subsequent schedule within a degree program. Students wishing to alter the schedule used to monitor their progress should seek assistance from a program counsellor (refer to Chapter VII - Academic Advising).

### Scheduling

#### Undergraduate Course Timetable

The scheduling of all undergraduate courses is the responsibility of Scheduling Services, ORS.

The scheduling cycle for each Fall and Winter semester commences approximately one year in advance. Course scheduling request data is due in Scheduling by the specific dates to be established in Scheduling each year. The official timetable for each semester is published on WebAdvisor two weeks prior to the commencement of the initial Course Selection period for that semester (for Summer and Fall in mid-February, for Winter in mid-September.)

All courses are scheduled according to the Senate approved slot system which allows for 3 x 1 hour slots meeting at the same time on Monday, Wednesday and Friday, 2 x 1.5 hour slots meeting at the same time on Tuesday and Thursday and 3-hour evening slots M-F. This basic grid is overlaid with 1x 3 hour slots and slots for other approved class formats (e.g. 1 x 4 hr) in such a way as to minimize course conflicts and maximize efficient use of teaching space. Courses may also be published with time “TBA”. In these cases it is the responsibility of the department/school to communicate first meeting information to registered students prior to the commencement of classes.

Prior to the commencement of classes, regular class meeting times may not be assigned to classes published as “TBA”. If a department/school wishes to assign times for regular class meetings after the commencement of classes, registered and (within the Add Period) interested students must be consulted. The times selected for regular class meetings must be unanimously supported by students in a secret ballot, and comply with all scheduling regulations.

The University scheduling day runs from 0830–1730 and 1900–2200; Senate has approved the 1730-1900 “University Time” as a period which shall normally be free of all regular class meetings, labs, and seminars.

### Chair/Coordinator’s Responsibilities

- **Chair/Coordinator** is the designated Department/School Timetable Coordinator.

- **For the Undergraduate Calendar:**
  1. Submitting to Scheduling Services, no later than the established deadline, and as per Scheduling instructions, complete requests for courses to be offered in the subsequent academic year.
  2. Acting as liaison between instructors and Scheduling on all aspects of scheduling, including collecting information relevant to course scheduling from instructors, submitting it appropriately.
  3. Ensuring all courses are offered in the semester and format indicated in Chapter XII of the Undergraduate Calendar.
4. Approving the department’s course schedule before publication. This involves checking that no conflicts exist in instructor or program schedules.
5. Calculating projected enrollments for the subsequent academic year and monitoring enrollments through course selection periods, making adjustments to course capacities and the availability of sections as necessary.
6. Advising Scheduling immediately of changes to instructor assignments. Where late instructor assignments are necessary, assigning instructors in such a way as to avoid conflicts.

**Instructor’s Responsibilities**

1. Instructors are responsible for communicating to the Chair/Director or Department Timetable Coordinator, prior to the deadlines established within their department/school, any information relevant to the scheduling of courses in the subsequent academic year.
2. Instructors are expected to familiarize themselves with rooms assigned to their courses in advance of the commencement of classes.

**Registrar’s Responsibilities**

Scheduling Services, taking into account requests from academic units for preferred class times, creates the university timetable according to the following priorities:

i. No course conflicts exist in core courses as published in the schedule of studies in the Undergraduate Calendar.
ii. The number of elective courses available to students is optimized.
iii. Classroom space is allocated to courses on the basis of projected enrollments provided by the offering departments, and in such a way as to maximize the effective and efficient use of teaching space.
iv. No instructor conflicts exist.
v. Departmental requirements, requested by the Chair/Director or Department Timetable Coordinator, are met where possible.
vi. Scheduling Services will endeavour to keep the 17:30 – 19:00 “University Time” slot free of regularly scheduled classes, using the slot only as necessary, observing the guidelines approved by the Board of Undergraduate Studies (January 31, 2013).

**Changes to the Published Undergraduate Course Timetable**

**Additional Hours/Sections**

If it becomes necessary to add sections, using the slot only as necessary, observing the guidelines approved by the Board of Undergraduate Studies (January 31, 2013).

**Cancellations and Time Changes**

Once the course timetable has been published on WebAdvisor, requests for changes to class meeting times cannot be processed except in emergency circumstances and as approved by the Office of the Associate Vice-President (Academic). To obtain the approval of the AVPA in such circumstances, to change a class meeting time or to cancel a course, the Chair/Director should write via email, providing reasons for the request, to the Coordinator of the Undergraduate Curriculum (CUC), the appropriate Dean, and the Assistant Registrar. After the commencement of Course Selection, the Chair/Director is responsible for ensuring that students are not disadvantaged by any changes. This involves choosing alternate times that are conflict-free for all registered students, and communicating via email to all students the details of any change affecting their schedules.

- **Time changes after the publication of the timetable, prior to the commencement of classes.** Changes in scheduled meeting times are approved only in emergency circumstances (see above).
- **Time changes after the commencement of classes.** After the commencement of classes, changes to scheduled meeting times are permitted. Changes may be initiated by the instructor with his/her class, but are normally not made until after the end of the Course Selection/Add period unless the change is to accommodate students who would otherwise be unable to register in the course. Time changes made after the commencement of classes must not create conflicts for any registered students and must have the unanimous written approval of all registered students as determined by a secret ballot. New times must comply with University scheduling regulations and the academic unit offering the course should keep a record of student approval on file. Once approval is obtained, a request for the time change and new room assignment should be submitted by the Chair/Director or Department Timetable Coordinator to Scheduling Services so that the time and room can be updated on WebAdvisor. The instructor is responsible for ensuring that all registered students can attend during the new meeting times and for informing students of new times and room assignments.

**Classroom Assignment**

Scheduling Services assigns classrooms for regularly scheduled classes in such a way as to maximize the accommodation of enrollment numbers, access to presentation technology and other classroom attributes as requested by the offering department, accommodation of instructor or student disability, and the effective and efficient use of the central classroom inventory.
In addition to the above requirements, a supplemental privilege is only granted when appropriate and feasible. Therefore, it is unlikely that any student with a final grade of less than 40% would meet the requirements of the granting of a supplemental privilege and the decision to grant the privilege will normally be made in consultation with the instructor and a review of the student's course performance during the semester. Students must apply to their Program Counselor for a supplemental privilege no later than the fifth day of classes of the semester following the failure.

Note: Students in the B.Eng. Program should refer to the B.Eng. Program regulations under Conditions for Continuation of Study in Chapter X.

Note: Students in the D.V.M. Program should refer to the D.V.M. Program regulations under Conditions for Continuation of Study in Chapter X.

Procedures for Supplemental Privileges

1. Students must request a supplemental privilege by submitting the request to their Program Counselor no later than the fifth day of the semester following the failure. Students are encouraged to submit their request before classes begin to allow for receipt of a decision within the Add Period.

2. The Academic Review Sub-Committee, upon receiving a request from the student, will consult with the course instructor to obtain the student’s performance record for the course, the instructor's recommendation concerning the appropriateness and feasibility of a supplemental privilege, and the conditions that would be necessary to ensure that the requirements for the course are fulfilled.

3. The Academic Review Sub-Committee will consider the request and decide whether or not to grant a supplemental privilege.

4. Enrolment Services will inform the student and the Department Chair of the Academic Review Sub-committee’s decision. It is the responsibility of the Department Chair/Director to advise the appropriate instructor if the supplemental condition has been granted.

5. An instructor should not proceed with any supplemental privilege for a student until official notification of the granting of the privilege has been received from the Academic Review Sub-Committee or the Office of Registarial Services.

6. If the Academic Review Sub-Committee approves the request, the instructor responsible for the course will determine the nature of the privilege, which could be a written exam, an oral exam, an assignment, a laboratory practical, or any other method or combination of methods of evaluation.

7. The instructor will complete a Terms of a Supplemental/Deferred Condition form advising the student of the exact nature and due dates of the supplemental privilege.

8. If the instructor is unavailable to determine the details of the supplemental privilege, the Chair/Director of the Department of the department/school offering the course will take the necessary steps to assist in determining the requirements for completing the supplemental privilege.

9. If the requirement includes, or takes the form of, the satisfactory completion of a two-hour examination, the instructor will indicate this on the recommendation to the Academic Review Sub-Committee. If the exam is significantly different from another two-hour exam already completed by the student, the instructor must make this clear on the Terms of a Supplemental/Deferred Condition form provided to the student. For example, if the student had originally been assessed on a final exam covering only the last four weeks of the semester, and is now to be assessed on a comprehensive two hour exam, the nature of the new examination must be communicated to the student at the time the Terms of a Supplemental/Deferred Condition form is completed. The supplemental privilege should be completed by at least the thirtieth class day of the semester following the failure.

10. The student must contact the instructor within five days of notification in order to clarify the details of the supplemental condition.

11. The instructor will promptly mark the supplemental privilege and will forward to the Chair/Director an indication as to whether the student has passed or failed the supplemental privilege. The Chair/Director will initial the instructor’s decision and forward it to Enrolment Services, Office of Registrarial Services, by the date indicated in the request letter.

12. Enrolment Services, Office of Registrarial Services, will charge the fee for the privilege (refer to Chapter VI—Schedule of Fees) and update the student’s record where appropriate with the results of the completion of the supplemental privilege.

Transcripts

A transcript is an official document prepared by the Registrar recording a student's courses and grades. After convocation, the degree earned including the area(s) of specialization (major, minor, area of concentration, area of emphasis), graduation standing, and the converral date are noted on the transcript.

An official transcript may be ordered by submitting the "Official Transcript Request" form along with payment to Enrolment Services, Office of Registrarial Services. The order can be placed by mail, by facsimile or in person. The Official Transcript Request form can be found at: 

Mail transcript requests to: University of Guelph, Transcripts, Enrolment Services, U.C. Level 3, 50 Stone Road East, Guelph ON N1G 2W1

Faciesmile (credit card number with expiry date): 1-519-763-6809. Please do not send a cover sheet or final instruction page.

The transcript fee is listed in Chapter VI—Schedule of Fees. Students must have met all financial obligation to the University before official transcripts can be released for any purpose.

Processing time for transcripts is five business days.

Official transcripts from the University of Guelph will show that a degree has been conferred only after the date of convocation.

Transcript Request forms must be submitted by the student, along with payment to the Open Learning and Educational Support. The order can be placed by mail, facsimile or in person. The Open Learning Transcript Request form can be found at: hp://opened.uoguelph.ca/student-resources/resources/Transcript_request_revised_Mar_2_2016.pdf.

Transfer of Program

University of Guelph students wishing to transfer from one degree program to another (e.g. from B.Sc. to B.Eng. or from B.A. to B.Comm.) are required to submit an application form to Admission Services. Forms are available from Admission Services, third floor of the University Centre.

To clarify possible conditions or requirements for transfer, students are encouraged to consult with the admission counsellor for the program to which they wish to transfer before submitting their application. In cases where the student's performance has been inconsistent, the applicant must also submit a comprehensive support letter outlining the reasons for transfer as well as any factors contributing to the previous academic performance.

1. Procedures for Currently Registered Students

Course selection should be completed for the new program. The admission decision will be made after grades from the current semester are available and after the deadline date for course selection. The drop and add procedure must be used if the application is submitted after the course selection deadline date and if course selection has been completed for the current program.

Fee changes necessitated by the change of program will be calculated automatically by Student Financial Services.

The admission decision will be sent to the student's Campus Post Office Box during the first week of the following semester.

Students who have received an offer of admission which they wish to decline must contact Admission Services within the first 10 class days and complete the Cancellation of Program Transfer form. Students who fail to decline the offer will remain registered in the new program. All students must verify their course selection with their faculty advisor to ensure compatibility with their program of study.

2. Procedures for Students who are Not Currently Registered

An admission decision will be reached as soon as possible after receipt of the application and any supporting documentation.

Admission decisions will be mailed to the mailing address, if in effect, or to the permanent address. Information on mail registration and instructions concerning course selection will be sent under separate cover by Enrolment Services.

Note: Students who wish to transfer from one specialization to another in the same program (e.g. from Biological Science to Chemistry in the B.Sc. Program or from Drama to Sociology in the B.A. Program) are not required to apply to Admission Services. Such students should contact the faculty advisor for the specialization in which they wish to register. Students wishing to change specializations within the B.A.Sc. or B.Comm. Programs should consult with their program counsellor.

Verification of Information

WebAdvisor provides students with access to their current semester’s enrolment information and the academic evaluation for their current program.

Prior to the start of the June, October and March course selection periods registered undergraduate students will be sent an email which lists their current academic program and class level. The email also contains information regarding how to make corrections to the information listed.

Changes to personal information (e.g. name) may require presentation of appropriate documentation to Enrolment Services, Office of Registrarial Services.

Student hardcopy files are destroyed after 7 years of inactivity (e.g. no registrations) or one (1) semester after a student has graduated. In these cases the transcript is the only official file available from the Office of Registrarial Services that can be referenced during an appeal.

Students should familiarize themselves with the procedures regarding Academic Consideration, Grade Reassessment and Petitions.
Withdrawal

This section provides a summary of rules and regulations with respect to various types of withdrawal from the University. In some instances other sections of the calendar are referenced and these also should be consulted to ensure that a full understanding of the regulations is obtained. There are two types of withdrawals: voluntary or required.

Voluntary Withdrawal

There are two methods for voluntary withdrawal: cancelling a semester registration or withdrawing from a semester registration. Prior to the start of the semester, a student may cancel a semester registration by dropping all courses. As of the first day of classes and once the semester has started, a student may withdraw completely from all courses. Cancelling a semester registration or voluntarily withdrawing from a semester does not impact a student’s eligibility to continue in their program or to select courses for a future semester unless:

• the student is a newly admitted or readmitted student,
• the student’s full term standing has been assessed as required to withdraw, or
• the student has not registered for six consecutive semesters.

Cancelling a semester registration

Prior to the first day of classes a student who subsequently decides not to attend that semester may cancel their registration, by dropping all their courses for that term using WebAdvisor. For the Fall semester the required minimum registration deposit will automatically be forfeited. Please refer to Chapter VI-Schedule of Fees for specific details.

Please note that if the student has been newly admitted or re-admitted as of the semester to which the cancellation applies the cancellation of the courses cancels the offer of admission to that semester and the student must apply for readmission should they wish to attend the University of Guelph at another time.

Withdrawing from a semester registration

Commencing with the first day of classes and until the last day to drop classes, students may withdraw from the semester using WebAdvisor. A student who wishes to withdraw from a semester after the last day of classes will not be able to drop courses using WebAdvisor and must speak with their program counsellor to discuss their academic options, including requests for Academic Consideration.

A student receiving financial assistance through the Ontario Student Assistance Program or any other award/scholarship program is strongly advised also to contact Student Financial Services regarding the status of that award upon withdrawal.

The timing of the semester withdrawal and the reasons for it may have academic and financial implications. Up to the last day of classes, a student may withdraw without academic penalty. Students will be liable for fees payable in accordance with the refund schedule (see Chapter VI-Schedule of Fees regarding Refunds).

A student who withdraws from the semester must return all outstanding loans from the Library immediately upon withdrawal regardless of the original due date. Any items not returned will be declared “lost” and charged to the student’s account.

Students who do not register in a program of study for six or more consecutive semesters are required to apply for readmission if they wish to continue at the University of Guelph. In assessing whether a student is registered in a program of study, a cancelled semester registration does not count as a registered semester whereas a voluntary withdrawal from the semester does. Students who are studying on exchange programs, on a University schedule (see Chapter VI-Schedule of Fees regarding Refunds).

Withdrawing from a semester registration. Prior to the start of the semester, a student may withdraw completely from all courses. There are two methods for voluntary withdrawal: cancelling a semester registration or withdrawing from a semester registration. Prior to the start of the semester, a student may cancel a semester registration by dropping all courses. As of the first day of classes and once the semester has started, a student may withdraw completely from all courses.

Cancelling a semester registration or voluntarily withdrawing from a semester does not impact a student’s eligibility to continue in their program or to select courses for a future semester unless:

• the student is a newly admitted or readmitted student,
• the student’s full term standing has been assessed as required to withdraw, or
• the student has not registered for six consecutive semesters.

Required to Withdraw

Students may be required to withdraw from their program and/or the University of Guelph for reasons of academic performance or academic misconduct.

a. Academic Performance (please refer also to the section on Continuation of Study for detailed requirements)

Students who do not meet the continuation of study requirements for at least probationary status at the end of the winter or summer semesters will be required to withdraw and the two-semester rustication period will begin effective the subsequent semester.

At the end of the fall semester a student whose cumulative or semester average is below the level for probationary status at the end of the fall semester has two options:

i. The student may choose to accept “Required to Withdraw” status effective with the beginning of the subsequent winter semester by not registering for the winter semester. This means that the two-semester rustication period will begin immediately; or

ii. The student may register and continue in his/her program on probationary status for the winter semester. Failure to achieve the required semester average for probationary status at the end of the winter semester will result in the student being required to withdraw. In this case, the two-semester rustication period will begin effective the summer semester. Note: If a student registers and subsequently withdraws from the winter semester or has their winter semester registration cancelled, the required to withdraw status will apply immediately.

b. Academic Misconduct (refer also to the full Academic Misconduct Policy in this chapter)

One of the penalties that may be assessed against a student found guilty of academic misconduct is suspension from the University for a period of between one and six consecutive semesters. The effective date of such a suspension is determined by the dean responsible for the case.

c. Appeals (refer also to the sections on Academic Consideration and Academic Misconduct for full details of appeals processes)

Students who do not satisfy the program requirements for continuation of study and are required to withdraw may appeal for probationary status to the Academic Review Sub-Committee, and subsequently the Senate Committee on Student Petitions, on medical, psychological, or compassionate grounds. Students are not permitted to attend classes until such time as the appeal is granted.

Students who are suspended from the University as a result of academic misconduct may appeal to the Senate Committee on Student Petitions with respect to either the appropriateness of the penalty or the finding of guilt.

Readmission (refer also to the section on Readmission, earlier in Chapter VIII)

Students who meet one of the following three criteria must apply to Admission Services for readmission:

a. were required to withdraw from their program for a period of two or more semesters;

b. were suspended from the University for academic misconduct; or

c. have not registered at the University of Guelph for six or more consecutive semesters.

Readmission to a program at the University of Guelph is not automatic. Students should consult Chapter IV-Admission information regarding appropriate admission requirements and deadline dates. Applicants for readmission should include a statement which outlines the basis for readmission. Criteria used for readmission may differ by academic program. Students considering readmission should consult with the appropriate program counsellor regarding procedures and criteria for readmission to that program.

Students who withdraw on more than two occasions may be required to meet with the dean in order to clear their re-entry into a subsequent semester. At the discretion of the dean, the condition of re-entry may be a recommendation of either Student Health Services or Counselling Services that re-entry is advisable. Students who wish to appeal the decision of the dean have recourse to the Senate Committee on Student Petitions.

A student who wishes to be considered for readmission following a suspension for academic misconduct must make an application that will be judged on the basis of eligibility to continue. A student who is suspended for academic misconduct and also fails to meet the continuation of study requirements will normally be required to serve the associated penalties consecutively.

A student who has been expelled from the University for academic misconduct is not eligible for readmission to the University for at least five years. A student who wishes to be considered for readmission must petition the President to have the expulsion status removed (please refer to the Academic Misconduct Policy for detailed procedures).

Granting of Credit while on Rustication

Senate’s Policy on granting of credit for work done while on rustication is outlined below. It applies to any university credit course taken during the rustication period.

a. Students who have been required to withdraw for reasons of academic performance and who take university credit courses during their rustication period will be eligible for up to 1.00 credit provided they meet the criteria for readmission and the criteria for the transfer of credit. Students registered for courses through the Open Learning Program are not permitted to attend courses on campus.

b. Students who take university courses after the two-semester rustication period or after a period of suspension may transfer all these credits, provided the student meets the criteria for readmission and the criteria for the transfer of credit.

c. Students who have been suspended for academic misconduct will not receive any credit for courses taken during the suspension period.
IX. Scholarships and Other Awards

General Statements on Awards

The Senate of the University of Guelph is charged with the responsibility “to deal with all matters arising in connection with the awarding of fellowships, scholarships, bursaries, medals, prizes and other awards” (University of Guelph Act). In carrying out these responsibilities, Senate has established various policies regarding awards and scholarships, and approves the terms and conditions attached to such awards. Each College has a College Awards Committee, which is responsible for the awarding of scholarships and bursaries in the programs under its authority. In addition, Student Financial Services is responsible for awarding bursaries on the basis of financial need, and evaluating the needs component of Scholarships with Financial Need. Some scholarships and bursaries are open to all students regardless of degree or diploma program and others are restricted to students in particular degree programs/majors or departments. Students entering the 1st semester of their first undergraduate degree should consult the “Entrance Scholarships” and “Entrance Scholarships with Financial Need” sections of the calendar for a listing of those awards for which they may be eligible. In-course students currently registered at the University of Guelph or transfer students (students who are entering the University of Guelph from another post-secondary institution) should refer to the “In-course” sections for a listing of awards for which they may be eligible. Also refer to Section VIII—Undergraduate Degree Regulations and Procedures, Academic Misconduct, Penalties, for additional regulations regarding scholarships and bursaries.

Eligibility Canadian Citizens/Permanent Residents: To be eligible for entrance awards, you must be a Canadian citizen or permanent resident entering the 1st semester of post-secondary studies for the first time. To be eligible for in-course awards, you must be registered in an academic term and have completed a minimum of two semesters of study at the University of Guelph. In-course awards are available to all currently registered students, unless otherwise stated in the eligibility clause of a specific award. A minimum of 70% average is required for all scholarships. Where applications are required, it is the student’s responsibility to obtain an application from Student Financial Services and to see that it is returned prior to the deadline date.

Eligibility International Students: Financial Assistance Programs are available specifically for International Students and include specific Entrance Awards, Work-Study and In-course Bursaries. International students must complete one full calendar year before applying for Work-Study or an In-course student bursary. In addition, many of the University of Guelph’s scholarships for upper-year students are available to enrolled international students and are based on academic standing. A minimum of 70% average is required for all scholarships. Where applications are required, it is the student’s responsibility to obtain an application from Student Financial Services and to see that it is returned prior to the deadline date.

Award: Generic term used to refer to any type of award. These include scholarships, bursaries, travel grants and ACCESS awards.

ACCESS Awards: The University established an endowment fund through generous donor contributions and has been matched by the provincial government’s Ontario Student Opportunity Trust Fund (OSOTF) program and the Ontario Trust for Student Support (OTSS). The income generated from these endowments will be used to support financial aid programs. The awards created will be used to assist Canadian citizens or permanent residents who meet the Ontario residency requirements as mandated by the OSOTF/OTSS program. Students must complete a Financial Need Assessment Form in order to be considered. Please contact the Awards Office, Student Financial Services for further details.

Ontario Government Mandated Terms for an OSOTF/OTSS Award:

i) be a Canadian citizen or permanent resident;
ii) be a Ontario resident as defined by a) have lived in Ontario for a period of at least 12 consecutive months up to the beginning of full-time post-secondary study; or b) the student's spouse has lived in Ontario for at least 12 consecutive months up to the beginning of the current year full-time post-secondary study period; or c) the student's parent(s)/stepparent(s)/legal guardian/official sponsor has lived in Ontario for at least 12 consecutive months up to the beginning of the current year full-time post-secondary study period;
iii) financial need as determined by the University of Guelph's Financial Need Assessment procedures.

Bursary: An award provided to a student on the basis of financial need only. Financial need is determined by the University of Guelph's Bursary Committee after an evaluation of the Financial Need Assessment Form has been submitted by the student. Academic merit is not a consideration in awarding a bursary. You must be a Canadian citizen or permanent resident of Canada to be considered for bursaries. International students are eligible to apply for the International Student Bursary only.

Scholarship: An award provided on the basis of academic performance and given for further study. Given that the merit component is normally academic, it may include such non-academic aspects as leadership, extracurricular activity, volunteerism, and community involvement. Scholarships can be monetary, prizes, or medals. Financial need is not a consideration of scholarships.

Scholarships with Financial Need: An award provided on the same criteria as scholarships, but financial need is a consideration.

Travel Grants: These grants are provided to students who wish to travel as part of their program of study. Examples of travel opportunities include: Exchange/Study Abroad programs, letter of permissions, field courses, and independent research projects that are related to a student's program of study.

Payment of Awards for In-course Students: Please note that Student Financial Services will apply all internal awards against outstanding balances on students’ accounts.

Payment of Awards for Entrance Students: Awards will be applied directly to the student’s financial account in two equal payments in the fall and winter semesters.

Students who receive an award and who withdraw from the semester in which the award is received, or change the number of credits in which they are registered, may have their award adjusted. This adjustment will be calculated up to the twentieth class day according to the rebate schedule in effect for that semester and the published terms and conditions for the award.

Notice of Disclosure: It is understood that merit award winners' names will be released to donors and may be published as a condition of the award.

The University reserves the right to amend awards subject to the availability of funds.
Bachelor of Applied Science

Please refer to the General Statement on Awards for:

• Award Eligibility
• ACCESS Awards Eligibility
• Ontario Student Opportunity Trust Fund (OSOTF) Program
• How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

Entrance Scholarships

Angelo and Frank Agro Undergraduate Scholarship [E0520]

These scholarships are provided by the Agro Scholarship Fund. Apply, by April 15, to Student Financial Services (awards@uoguelph.ca), with a one to two-page, point-form listing of 4-H activities. This list should describe current or past activities within 4H and the position titles/names, if applicable. Attach a reference letter from a 4H club official. These scholarships will be awarded to the students demonstrating the most active involvement with 4H clubs. The committee will consider any appropriate elements, such as the length of membership in 4H, leadership role(s) in support of 4H, creativity in 4H outreach, and coordination with other rural and academic activities. Credit will be given to those who have achieved in county, provincial and national 4H competitions. Recipients must maintain full-time studies and at least a 70% program average each year for continuation of the award.

Donor(s): The Frank Agro Estate
Qualification(s): Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 - 4H projects.
Amount: 7 awards of $7,000 (payable over 4 years of study)

Board of Governors' Scholarships [E0317]

This scholarship is considered one of the University of Guelph's most prestigious entrance scholarships with only 25 awards being awarded each year. Recipients of this scholarship are entering their program with one of the highest admission averages of that cohort. The scholarship will be renewed each year provided recipients remain registered in full-time studies and achieve a minimum 80.0% average in their previous academic year of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80.0% or better average in the previous academic year of full-time study. Payments lost cannot be added to the end of the award period. This award cannot be held with the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships. Application is not required.

Donor(s): Board of Governors
Qualification(s): Academically outstanding entering students with the highest admission averages of the entering cohort.
Amount: 25 awards of $20,000 (payable over 4 years of study)

Chancellor's Scholarships [E0668]

This scholarship was established in 2009 in honour of current and past University of Guelph Chancellors and is considered one of the most prestigious entrance awards offered by the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships, or the Board of Governors' Scholarships.

Donor(s): University of Guelph
Qualification(s): Students entering a degree program with a minimum 90% admission average who have taken leadership roles in activities that demonstrate an interest in international relations and development, or leadership roles in activities relating to arts and culture and demonstrate the potential to become a leader in society.
Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

Clara E. Elliott Education Scholarship [E0210]

The recipients will be selected on the basis of academic achievement and demonstrated leadership ability and potential as evidenced through positions held, extracurricular activities, involvement in school/community, especially in the areas of teaching and education. Preference will be given to students planning a teaching career in areas related to family studies including nutrition education and early childhood education. To maintain the award for the second year of study, the recipients must have a minimum cumulative average of 77% and continue to demonstrate the qualities on which the award was given.
To maintain the scholarship into the third and fourth years, the recipients must have a minimum average of 80% in the prior year and continue to demonstrate the qualities on which the award was given. Apply by April 15 to Student Financial Services with a 1-2 page letter outlining academic achievements and demonstrated leadership ability and potential. Two letters of reference evidencing demonstrated leadership qualities should be included in the application.

Donor(s): Clara E. Elliott Estate
Qualification(s): Students entering the BASc. program with at least an 80% admission average who plan to pursue a career in teaching or education at any level.
Amount: 2 awards of $10,000 (payable over 4 years of study)

Clara E. Elliott Entrance Scholarship [E0095]

The recipient will be selected on the basis of academic achievement and demonstrated leadership ability and potential as evidenced through positions held, extracurricular activities, involvement in school and/or the community. To maintain the award for the second year of study, the recipient must have a minimum 77% average and continue to demonstrate the qualities on which the award was given. To maintain the scholarship into the third and fourth years, the recipient must have a minimum 80% average in the prior year and continue to demonstrate the qualities on which the award was given.
Apply by April 15 to Student Financial Services with a 1-2 page letter outlining academic and demonstrated leadership achievements. Two letters of reference evidencing demonstrated leadership qualities should be included in the application.

Donor(s): Clara E. Elliott Estate
Qualification(s): Students entering the BASc program with at least an 80% admission average and who have demonstrated leadership potential.
Amount: 2 awards of $10,000 (payable over 4 years of study)

Ed Carter/University of Guelph Faculty Association Scholarship [E0292]

Award is payable at $750 per annum in the student's 1st, 3rd, and 5th semester levels, provided a cumulative average of at least a 70% is maintained. To receive the final payment, the recipient would normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.

Donor(s): University of Guelph Faculty Association
Qualification(s): Students entering any undergraduate degree program at the University of Guelph from Wellington county.
Amount: 2 awards of $2,250 ($750 in the 1st, 3rd, and 5th semesters)

Ernie Kendall Science Entrance Scholarship [E0668]

Established by Ernest Kendall, O.A.C. B.S.A. 1932 and awarded to the student entering a science program with the highest admission average. Preference will be given to students that graduated from Elmira District School. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Board of Governors' Scholarships. Application is not required.

Donor(s): Ernest W. Kendall
Qualification(s): Students entering any sciences (B.Sc., B.Sc.(Agr.), B.Sc.(Env.), B.Sc.(Tech), B.A.Sc., B.A., B.B.R.M., B.Eng.) degree program with a minimum 80% admission average.
Amount: 1 award of $2,000
### GFTC Legacy Fund Experience Scholarships [E0918]

In recognition of the Guelph Food Technology Centre’s (GFTC) long association with University of Guelph the GFTC Board has created these scholarships. These scholarships recognize academic excellence and encourage students to study and pursue careers in the food sector. Selection is based on academic achievement, quality of past work experience and relevant future career goals. This scholarship is not tenable with the GFTC Legacy Fund Undergraduate Entrance Scholarships. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) by submitting a one page outlining past work experience and one page letter outlining commitment to future career goals in the food sector. In order to maintain eligibility, recipients must remain registered in one of the specified programs.

**Donor(s):** The Guelph Food Technology Centre (GFTC)


**Amount:** 4 awards of $11,500 (payable over 4 years of study)

### GFTC Legacy Fund UG Entrance Scholarship [E0899]

In recognition of the Guelph Food Technology Centre’s (GFTC) long association with University of Guelph the GFTC Board has created the GFTC Legacy Fund Undergraduate Entrance Scholarships. These scholarships recognize academic excellence and encourage students to study and pursue careers in the food sector. Selection is based on high school graduation average. No application required. Not tenable with the Board of Governors’ Scholarship, Chancellor’s Scholarship, Devine Family Scholarship, Lincoln Alexander Chancellor's Scholarship and President’s Scholarships. If there are insufficient eligible candidates in any one of the academic programs noted above, in any given academic year, the scholarship(s) will be redistributed to eligible candidates from any other of the identified academic programs. Preference will be given to eligible candidates in the B.Sc. Food Science program. In order to maintain eligibility, students must remain registered in one of the specified programs.

**Donor(s):** The Guelph Food Technology Centre (GFTC)


**Amount:** 17 awards of $14,000 (payable over 4 years of study)

### Gordon W. Innes Scholarship [E0140]

Application is not required.

**Donor(s):** Gordon W, ‘Sparky’ Innes Scholarship Fund Committee of the Woodstock Agricultural Society.

**Qualification(s):** Student entering any degree program from Oxford County with the highest admission average.

**Amount:** 1 award of $1,000

### Hardy International Student Scholarship [E0659]

Selection is based on the assessment of the student’s admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.

**Donor(s):** Mrs. Marion Hardy

**Qualification(s):** Full-time international students (defined as paying the international student tuition and fees) entering any degree program.

**Amount:** 1 award of $2,000

### International Student Entrance Scholarships [E0408]

In support of the University’s strategic direction of internationalism, entrance scholarships are available each Fall semester to the top international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all relevant documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.

**Donor(s):** University of Guelph

**Qualification(s):** Students on a “student visa” entering an undergraduate degree program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.

**Amount:** Several awards ranging in value from $5,500 - $8,500

### J.D. MacLachlan Scholarship [E0170]

Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.

**Donor(s):** The J.D. MacLachlan Trust

**Qualification(s):** Students entering any degree program at the University of Guelph.

**Amount:** 1 award of $1,500

### Jack and Lillian MacDonald Scholarship [E0379]

Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnic Institute) who has the highest cumulative average at the University.

**Donor(s):** Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald

**Qualification(s):** Entering students coming from the Six Nations Polytechnic (SNP).

**Amount:** 1 award of $900

### Janet Wardlaw Scholarship [E0612]

Established in 1960, formerly known as the Mac-FACS-FRAN Alumni Entrance Scholarship - FRAN (E0522) and re-named in 2006 to honour Dr. Janet Wardlaw, the first Dean of FACS (1964-1984), Associate Vice President, Academic (1984-87), Fellow of the University of Guelph and Honorary President of the Mac-FACS-FRANS Association. Selection will be based on the highest admission average. This award is not tenable with the President's Scholarship, the Lincoln Alexander Chancellor's Scholarship or the Devine Family Scholarship. Application is not required.

**Donor(s):** Mac-FACS-FRAN Alumni Association

**Qualification(s):** Students entering the BASc. program in the Department of Family Relations and Applied Nutrition.

**Amount:** 1 award of $1,000

### L.A. Beattie & J.C. Beattie Memorial Scholarship [E0026]

Established in memory of Lillie Ann Beattie and Jeannie Cockburn Beattie. Application is not required.

**Donor(s):** The estate of Jessie L. Beattie

**Qualification(s):** Students entering the BASc program.

**Amount:** 1 award of $650

### Lincoln Alexander Chancellor’s Scholarships [E0689]

Established in 2001 in honour of Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This award cannot be held with the President’s Scholarships, the Chancellor’s Scholarships or the Board of Governors’ Scholarships.

**Donor(s):** Many Donors

**Qualification(s):** Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.

**Amount:** 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

### McArthur-Humphries Scholarship [E0183]

An equal number of awards are available to students from each county. In the case of insufficient eligible applicants from one county, the awards will be given to eligible applicants from the other county. These scholarships are awarded to students with the highest admission averages. Application is not required.

**Donor(s):** Wilhelmina McArthur-Humphries Trust Fund

**Qualification(s):** Students entering any degree program with a minimum 75% admission average from Lanark and Wellington Counties.

**Amount:** 8 awards of $1,000
### President’s Scholarship [E0238]

Established in 1987 in honour of their donors or distinguished members of the University and are considered one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the Chancellors’ Scholarships, the Lincoln Alexander Chancellor’s Scholarships or the Board of Governors’ Scholarships.

#### Donor(s):
A number of President’s Scholarships have been named in honour of the following people and/or donors:

- **Cecil H. Franklin and Ingrid Franklin**
  - In honour of Cecil Franklin, former Chair of the Board of Governors and Honorary Fellow of the University, the University of Guelph has named one of these twelve prestigious entrance awards to recognize his financial contributions and volunteer support to the President’s Entrance Scholarship program.
- **Charles S. Humphrey**
  - In memory of Charles S. Humphrey, a former President of Hart Chemical Company Canada Ltd. and long-time friend, the University has named one of these twelve prestigious entrance awards to recognize his financial contribution through his estate to the President’s Entrance Scholarship program.
- **Jack R. Longstaffe**
  - The University of Guelph has named one of these twelve prestigious entrance awards in memory of Jack R. Longstaffe to recognize his financial contribution through his estate to the President’s Entrance Scholarship program.
- **Kathleen and Frederick Metcalf**
  - Mr. and Mrs. F.T. Metcalf of Guelph have endowed this award. After a distinguished career in cable TV, broadcasting and publishing, the late Mr. Metcalf retired as President of Maclean Hunter Ltd. and Chairman of the Board of Maclean Hunter Cable Ltd. He was Honorary Chairman of Maclean Hunter Cable Ltd. and a member of the University of Guelph Heritage Board (1996).
- **Rol-land Farms Limited**
  - Two of the scholarships are endowed by the four shareholders of Rol-land Farms Limited of Blenheim, Ontario, Hank, Peter, Arthur and Eric Vander Pol and their families. The Vander Pol families are generous supporters of a number of University projects and programs.
- **Lillian Stewart Usher**
  - The University of Guelph has named one of these twelve prestigious entrance awards in honour of Lillian Stewart Usher a friend of the University to recognize her financial contribution through her estate to the President’s Entrance Scholarship program.

#### Qualification(s):
Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and/or communities.

#### Amount:
8 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

### Project Hero Scholarship [E0979]

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship program.

#### Donor(s):
University of Guelph

#### Qualification(s):
Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

#### Amount:
Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

### Ted Morwick Scholarship [E0796]

Established by Ted Morwick, honorary alumni. The student with the highest admission average will be selected. This award is conditional on maintaining a 80% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify, i.e. The student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year. If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with the Chancellors’, President’s or Board of Governors’ Scholarships. No application is necessary.

#### Donor(s):
Mr. Edward (Ted) Morwick

#### Qualification(s):
Students entering any degree program in the College of Arts.

#### Amount:
4 award of $8,000 (payable over four years.)

### University of Guelph Entrance Scholarships [E0291]

The value of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student’s financial account in two equal payments in the fall and winter semesters. Application is not required.

#### Donor(s):
University of Guelph

#### Qualification(s):
Students entering their first year of post-secondary studies for the first time with a minimum 85.0% admission average.

#### Amount:
Several awards of $2,000. Several awards of $3,000

### W. Penri Morris Memorial Scholarship [E0430]

Established by the family in memory of Penri Morris, who was killed World War II action in 1944 at the age of 21. Penri grew up on the family fruit farm near Forest, Ontario. After graduating from high school, he joined the Royal Canadian Air Force and was attached to the Royal Air Force Bomber Command as a navigator at the time of this death. Awarded to the student with the highest cumulative academic performance above 75% in all courses of the last year in high school study (full-time or equivalent study). Application is not required.

#### Donor(s):
Prof. Rosalina Morris

#### Qualification(s):
Students entering first year of any undergraduate program from North Lambton Secondary School in Forest, Ontario, in their absence, from Lambton County, and their absence, from Ontario.

#### Amount:
1 award of $1,000
Walter and Halina Slabikowski Scholarship [E0766]
This scholarship was established in memory of Walter and Halina Slabikowski who sent their first generation Canadian born children to university to enrich their lives and provide them with greater opportunities. The award will be given to the student with the highest admission average. The residence deposit must be received by published deadline dates. Submit by email to awards@uoguelph.ca your full name, student ID number and a statement attesting to your parents’ placement of birth and non-participation in post secondary education by April 15th.

**Donor(s):** Irene Thompson and Slabikowski Family  
**Qualification:** Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary studies.

**Amount:** 1 award of $1,000

Waterloo-Wellington Science & Engineering Fair (WWSEF) Scholarship [E0619]
Established to recognize excellence of the project submissions and encourage students to pursue university studies at the University of Guelph.

**Donor(s):** University of Guelph  
**Qualification:** Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.

**Amount:** various awards of $1,000

Entrance Scholarships with Financial Need

**Bill Klopp Memorial Scholarship [E0150]**
Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F) by April 15. Students should complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

**Donor(s):** Ross and Mary Lou Klopp  
**Qualification:** Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.

**Amount:** 1 award of $500

**Devine Family Scholarships [E4542]**
Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of Governors member, with the assistance of the Ontario government's OTSS program. These scholarships will be given out once every four years, unless the incumbent fails to qualify. The scholarship is renewed in years two, three and four with continued demonstrated financial need and full-time registration; students are required to register for no less than 2.0 credits each semester. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the "Devine Family Scholarship Application". Deadline to submit the complete application (both parts, the E.N.A.F. and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Chancellors' Scholarships, but can be held with all other entrance awards. ACCESS AWARD.

**Donor(s):** Mr. Peter J. Devine with matching funding through the Ontario Trust for Student Support program
**Qualification(s):** Students who are Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person entering any University of Guelph undergraduate degree program with a minimum 80% admission average. Preference will be given to students who are Black Canadians. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** up to 2 awards of $50,000 each (payable over 4 years of study)

Interhall Council Entrance Scholarship [E0636]
Established by the Interhall Council, the residence student government that programs, advocates and represents residence students to administration and Student Housing Services (www.interhall.ca), to ensure that the residence experience remains accessible to students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.): application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15.

**Donor(s):** Interhall Council  
**Qualification:** Students entering a full-time undergraduate degree program with a minimum 85.0% admission average, residing in residence during first year on the Guelph campus with demonstrated financial need and demonstrated strong leadership ability.

**Amount:** 5 awards of $1,000

Kenneth O. Hammill-Blount Canada Scholarship [E4356]
Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government's OSOTF program. Selection will be based on greatest financial need from the President’s, Lincoln Alexander Chancellor's or Chancellors' Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President’s, Lincoln Alexander Chancellor's or Chancellors' Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) by April 15. ACCESS AWARD.

**Donor(s):** The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Entering students who have applied for the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $9,600 (payable in 8 payments of $1,200)

L. Norman Gibbins Microbiology Scholarship [E4392]
Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government's OTSS program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

**Donor(s):** Family, friends and colleagues of Norman Gibbins with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students entering the Microbiology major in the B.Sc. program with a minimum 80% admission average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $2,500

P.A.J. Clarke Family Scholarship [E0381]
Paul and Aileen Clarke and their family established the endowment for this entrance scholarship in honour of Paul's father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining extracurricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not a requirement. This award is not tenable with the President's Scholarships or Lincoln Alexander Chancellor's Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

**Donor(s):** Paul and Aileen Clarke  
**Qualification(s):** Students with a minimum 80% average with a record of leadership and community participation. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm.

**Amount:** 1 award of $12,000 (payable over 4 years)
Rol-Land Farms Scholarships [E4519]
Established by Rol-Land Farms, with the assistance of the Ontario government's OSOTF program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): Rol-Land Farms with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students entering a degree program with demonstrated financial need and a minimum 80% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 13 awards of $2,000

Entrance Bursaries

Elizabeth Maud Hunter (Shier) Bursary [E3575]
This award was created to assist first-year students in obtaining a post-secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing a similar situation. Preference given to a student from the County of Brock. Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F.) for Entrance Awards. ACCESS AWARD

Donor(s): The Estate of the Late William Henry "Harry" Hunter with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering any degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSF award (see General Statements on Awards).

Amount: 3 awards of up to $4,500

First Year Student Residence Bursary [E3066]
These 3 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the on-line Financial Need Assessment Form for Entrance Awards by April 15.

Donor(s): Student Housing Services

Qualification(s): Students entering any degree program with demonstrated financial need.

Amount: 5 awards of $500

Harvey Graham Bursary [E3030]
Provided by Harvey Graham (O.A.C. ’39), Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a farm and complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

Donor(s): Harvey Graham, O.A.C. ’39

Qualification(s): Students entering any degree program who come from a working farm and who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.

Amount: 1 award of $1,500

International Student Entrance Bursaries [E3043]
In support of the University’s strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students entering an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar's Entrance Award Application to Student Financial Services.

Donor(s): University of Guelph

Qualification(s): Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.

Amount: Several awards ranging in value from $1,000 to $3,000

Registrar’s Entrance Bursaries [E0384]
Established by the University of Guelph to support entering undergraduate students with identified financial need. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Bursary, but can be held with all other entrance awards.

Donor(s): University of Guelph

Qualification(s): Students entering any degree program with a minimum registration of 1.5 credits and demonstrated financial need.

Amount: 500 awards of $4,000

Robert Arthur Stewart Bursaries [E3272]
Established in memory of Mrs. Elsa H. Stewart of Pakenham, Ontario. Mr. Stewart graduated from the Ontario Agricultural College in 1933 and Mrs. Stewart from Macdonald Institute in 1932. Applicants for these bursaries should have a good academic record and an active interest in community affairs. A letter from the student and a recommendation from the County agricultural representative or the secondary school principal should be sent to Student Financial Services by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

Donor(s): The Estate of Mrs. H. Stewart

Qualification(s): Students from the Ontario Counties of Lanark and Renfrew, and the Regional Municipality of Ottawa-Carleton, entering the 1st semester of a degree program at the University of Guelph.

Amount: 14 awards of $1,000

Steven Jones Memorial Bursaries [E3077]
Established by Mr. and Mrs. Jones in memory of their late son, Steven Jones (B.Comm. ’97). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. Selection will be made on demonstrated financial need.

Donor(s): Mr. Harry Jones

Qualification(s): Students entering any degree program with demonstrated financial need.

Amount: several awards of $2,000

Tamnie Nevills Memorial Bursary [E3541]
The family and friends of the late Tamnie Nevills (FACS ’81), a former teacher at Bluevale Collegiate Institute in Waterloo, ON, with the assistance of the Ontario government’s OSOTF program have provided this award to a student entering a major in the Department of Family Relations and Applied Nutrition. Apply by completing the online Financial Need Assessment Form (N.A.F.). Students should complete the Financial Need Assessment Form (N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student). Deadline to submit the application is April 15. ACCESS AWARD

Donor(s): The family and friends of Tamnie Nevills (FACS’81) with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Student who is entering a major in the Department of Family Relations and Applied Nutrition that has demonstrated financial need. Preference will be given to a graduate of Bluevale Collegiate Institute in Waterloo, ON, then to Waterloo Collegiate Institute. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $1,000
University of Guelph Accessibility Bursaries [E3038]
Established by the University of Guelph to support students with substantial demonstrated financial need. In addition, students will be automatically approved for to participate in the work-study program conditional on the student securing a work-study approved position on campus. Participating in the work-study program is not required to hold this bursary. Payments of this award and the eligibility to participate in the work-study program are conditional upon the recipient receiving funding through their provincial/territorial and/or federal student loan assistance program and registration in a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Bursary, but can be held with all other Entrance Awards.

Donor(s): University of Guelph
Qualification(s): Students entering any degree program with demonstrated financial need and a minimum registration of 1.5 credits.
Amount: 200 awards of $14,000 (payable over 4 years) plus Work-study approval

In-course Scholarships

A.M. Bell Prize [C0028]
Provided by the estate of the late Adna M. Bell, a 1905 Macdonald Institute graduate, to the student with the highest grade in the course. Application is not required.

Donor(s): The Estate of Adna M. Bell
Qualification(s): Students registered in the Applied Human Nutrition major who have completed NUTR*4900 Selected Topics in Human Nutrition.
Amount: 1 award of $350

Aboriginal Student Engagement Scholarship [10922]
Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA's commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status), Métis or Inuit and outline volunteer/leadership experience within the Aboriginal community. The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but not be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

Donor(s): Aboriginal Student Association
Qualification(s): Students registered in any program who self-identify as First Nation (status and non-status), Métis or Inuit, who are engaged in the Aboriginal community either in their home community or at the University of Guelph.
Amount: 1 award of $1,000

Adelaide Hoodless Memorial Scholarships [10137]
Established by these estates in memory of their mother, Adelaide Hoodless, to reward students with the highest cumulative averages. One award each year will be awarded to a student completing between 5.25 and 10.0 credits, one to a student completing between 10.25 and 15.0 credits, and one to a student who has already completed at least 15.0 credits. This scholarship can only be held once. Application is not required.

Donor(s): The Estates of Joseph Bernard Hoodless and Muriel I. Bostwick
Qualification(s): Students registered in the BASc. program who have completed at least 5.0 credits.
Amount: 4 awards of $4,000

Alumni House Call Centre Scholarship [I1020]
Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15th with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

Donor(s): Former Employees of the Alumni House Call Centre
Qualification(s): Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.
Amount: 1 award of $1,000

Alum Joseph Tribute Scholarship [10756]
Selection will be based on significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities in the following academic year. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

Donor(s): Dr. Alun Joseph Dean of the College of Social and Applied Human Sciences from 2000-2010 & Mrs. Gillian Joseph (CSS BA '94, FACS MSc '96) along with contributing donors to the Alun Joseph Tribute Fund
Qualification(s): Full-time students registered in any program offered by the College of Social and Applied Human Sciences with a minimum 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the following academic year.
Amount: 1 award of $2,000

Ann E. Barber Memorial Scholarship [10023]
Established in 1963 in memory of Ann E. Barber, former superintendent of Macdonald Hall from 1931 to 1942 and Dean of Women from 1946 until her retirement in 1956, by the Mac-FACS Alumni Association. Apply to the FRAN Undergraduate Awards Committee with a one-page description of contributions to student activities by May 15. The award will be given to the student who has made the greatest contribution to student activities in residence or on campus.

Donor(s): Mac-FACS Alumni Association
Qualification(s): Full-time student registered in a program offered by the Department of Family Relations and Applied Nutrition who have completed between 10.5 and 15.0 credits and achieved a minimum cumulative average of 70%.
Amount: 1 award of $1,000

Anne Callaghan Memorial Scholarship [10038]
The alumni, faculty and staff of the former College of Family and Consumer Studies established a scholarship in memory of Professor Anne Callaghan. Awarded to the student who achieves the highest cumulative average. Application is not required.

Donor(s): The alumni, faculty and staff of the College of Social and Applied Human Sciences
Qualification(s): Co-op students in the BASc. program who have completed 9.5 credits.
Amount: 1 award of $400

Bill Taylor Memorial Scholarship [10280]
Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.

Donor(s): AMF Canada Ltd.
Qualification(s): Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or intercollegiate athletics.
Amount: 1 award of $900

Agincourt Milk Producers’ Association Scholarship [I0003]
Preference will be given to students from York County or the Region of Durham. Apply, by May 15, to the Department of Family Relations and Applied Nutrition Awards Committee with a letter describing farming background. Presented in the Fall semester.

Donor(s): Agincourt Milk Producers
Qualification(s): Students registered in the BASc. program who have completed between 4.0 and 17.5 credits and live on a farm in Ontario.
Amount: 1 award of $1,500
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Amount</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brathwaite Business Scholarships [I0827]</strong></td>
<td></td>
<td></td>
<td>Anonymous</td>
<td>Named in honour of Professor Bill Brathwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15th with a resume and 500-word statement describing why business courses, in addition to their major, will benefit their future career. Shortlisted applicants may be invited for an interview with the LANG Awards Committee. Selection is based on the student who best describes why taking business courses, in addition to their major, will benefit their future career. Students may hold this award only once.</td>
</tr>
<tr>
<td><strong>Bridge Builder Scholarship [I1050]</strong></td>
<td></td>
<td></td>
<td>Muslim Society of Guelph</td>
<td>The Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150. Introduction to Canadian Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) who have completed 1.0 credits towards the minor. Apply to the FRAN Awards office by April 1 with a letter outlining the most significant impact made in building bridges in the local community as demonstrated through volunteer activities. Shortlisted applicants may be invited for an interview with the LANG Awards Committee. Selection is based on the student who best describes why taking business courses, in addition to their major, will benefit their future career. Students may hold this award only once.</td>
</tr>
<tr>
<td><strong>Burnbrae Farms Prize in Applied Human Nutrition [C1087]</strong></td>
<td></td>
<td></td>
<td>Burnbrae Farms</td>
<td>Burnbrae Farms is a family owned and operated company that has been producing eggs for over 70 years. As part of their company’s ongoing commitment to nutrition education, Burnbrae Farms is providing this award to a student passionate about nutrition who may pursue a career as a Dietitian. Apply to the FRAN Awards office by April 1 with a letter outlining demonstrated leadership in College and/or University extracurricular and volunteer activities and indicate future plans of registering in a graduate program, if applicable. Selection will be based on significant demonstrated leadership in College and/or University extracurricular activities.</td>
</tr>
<tr>
<td><strong>Carolyn Mathieson Scholarship [I1123]</strong></td>
<td>1 award of $1,000</td>
<td>Students registered in the Child, Youth and Family (CYF) major in the Department of Family Relations and Applied Nutrition who have completed a minimum of 5.0 credits with demonstrated extra-curricular activity and community involvement.</td>
<td>Dan Mathieson</td>
<td>Students should apply by May 15 with a 500 word letter which describes previous volunteer work in the first two years of university and their interest in children and families. Selection will be based on the student’s commitment to community engagement and volunteerism as demonstrated by a 500 word letter describing previous volunteer work in the first two years of university and an interest in children and families. Applicants may be involved in a project at a local, national or international level and must provide a budget for the intended work or travel. Travel must be curriculum approved.</td>
</tr>
<tr>
<td><strong>Carolyn Oke Langill Community Outreach Scholarship [I1043]</strong></td>
<td></td>
<td></td>
<td>Carolyn Oke Langill, FACS alumna of 1980</td>
<td>The Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150. Introduction to Canadian Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) who have completed 1.0 credits towards the minor. Apply to the FRAN Awards office by April 1 with a letter outlining the most significant impact made in building bridges in the local community as demonstrated through volunteer activities. Shortlisted applicants may be invited for an interview with the LANG Awards Committee. Selection is based on the student who best describes why taking business courses, in addition to their major, will benefit their future career. Students may hold this award only once.</td>
</tr>
<tr>
<td><strong>CFRU Volunteer Scholarship [I0215]</strong></td>
<td>1 award of $2,500</td>
<td>Students registered in any program offered by the College of Social and Applied Human Sciences who have completed between 10.0 and 15.0 credits and who are participating in curriculum-embedded experiential learning in the following academic year.</td>
<td>C.F.R.U.</td>
<td>The award is presented to the student who has made the most significant contribution to the operation and goals of C.F.R.U. Apply to Student Financial Services by May 15 with a letter describing the contributions made as a volunteer with C.F.R.U. and how those contributions have supported the operation and furthered the goals of C.F.R.U. Applicants may be involved in a project at a local, national or international level and must provide a budget for the intended work or travel. Travel must be curriculum approved.</td>
</tr>
<tr>
<td><strong>Christina Victoria Kenny Memorial Scholarship [I1018]</strong></td>
<td></td>
<td></td>
<td>Family and Friends of Vikki Kenny</td>
<td>The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.</td>
</tr>
<tr>
<td><strong>Class of 1970 Scholarship [I0424]</strong></td>
<td>1 award of $1,000</td>
<td>Students registered in any degree program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.</td>
<td>Class of 1970: 25th Reunion Gift</td>
<td>Established by the Silver Anniversary celebrations to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.</td>
</tr>
<tr>
<td><strong>Class of Mac ’30 Scholarship [I0674]</strong></td>
<td>1 award of $1,400</td>
<td>Students registered in any degree program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.</td>
<td>Class of Mac ’30</td>
<td>Awarded to the student with the highest cumulative average. A student may receive this scholarship only once. Application is not required.</td>
</tr>
</tbody>
</table>

*IX. Scholarships and Other Awards, Bachelor of Applied Science*
Class of Mac '65 Scholarship [I0579]
The recipient will be selected on the basis of academic achievement and leadership ability as demonstrated through extracurricular involvement and/or volunteerism. Apply by letter to the Department of Family Relations and Applied Nutrition Undergraduate Awards Committee by May 15, including the Department Application Form and a comprehensive listing of extracurricular involvement and leadership roles.

Donor(s): Class of Mac '65
Qualification(s): Canadian citizens or permanent residents who are majoring in Applied Human Nutrition or Gerontology or Adult Development, Families and Well-Being in the BASc program and have completed a minimum of 12.5 course credits with a minimum 77% cumulative average.
Amount: 1 award of $1,500

Class of Mac 1964 Scholarship [I1033]
Apply to the CSAHS Awards Committee by May 15th with a one page letter outlining your experiential learning opportunity and the impact the experience had on your academic studies. Selection will be based on the student who best describes how their experiential learning positively impacted their academic studies. Preference will be given to students who best explain how their experiential learning has directly benefited their area of study within CSAHS; highest cumulative average will be used in the case of a tie.

Donor(s): The Class of Mac 1964
Qualification(s): Students registered in the College of Social and Applied Human Sciences with a minimum cumulative average of 75% and a minimum of 10.0 credits who have participated in experiential learning including curriculum-embedded experiential learning, placements, field courses and international travel opportunities within the last 3 semesters.
Amount: 1 award of $1,500

Class of Mac '62 Scholarship [I0836]
A 50th anniversary legacy project by the Macdonald Institute graduating class of 1962. Selection will be based on leadership ability as demonstrated through extracurricular involvement or dedication to volunteerism and community-based service during their undergraduate studies. Apply to the CSAHS Awards Committee by May 15th with a CV and a one page letter outlining extracurricular leadership experience, volunteerism and community-based service as well as how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

Donor(s): Class of Mac '62
Qualification(s): Full-time student enrolled in any BASc major offered by the Department of Family Relations and Applied Nutrition (FRAN) who has completed at least 10 credits with a minimum cumulative average of 77% and is participating in curriculum-embedded community-based experiential learning in the following academic year.
Amount: 1 award of $1,500

Collins Barrow Scholarship [I0040]
Offered by Collins Barrow, a national firm of Chartered Professional Accountants. Selection will be based on the student who has achieved the highest grade in the course ACCT*3330, Intermediate Financial Accounting, in the past academic year. In the event of a tie, the award will go to the student with the highest cumulative average. Application is not required.

Donor(s): Collins Barrow - Wellington Dufferin District
Qualification(s): Students who have successfully completed the course ACCT*3330, Intermediate Accounting.
Amount: 1 award of $1,000

CSAHS SA Student Leader Scholarship [I0864]
Selection will be based on contributions to college-related activities. Apply to the CSAHS Awards Committee by May 15 with a one page letter outlining volunteer experience within the college.

Donor(s): CSAHS Student Alliance
Qualification(s): Full-time students registered in any program offered by the College of Social and Applied Human Sciences who have completed a minimum of 8.0 credits and can demonstrate involvement in college-related volunteer activities.
Amount: 1 award of $1,000

CSAHS Student Volunteer Scholarship [I0482]
Inspired by Theresa Firestone, FACS ’78, and funded by the Harshman Fellowships Society and Pfizer Canada Inc. Students may apply on their own or be recommended by other students, faculty members or administrators from non-profit organizations. Apply to the CSAHS Dean's Office with two letters of recommendation, at least one of which should be from an individual who can speak to his/her volunteerism and a summary letter outlining the student's volunteer experience and what has been gained or learned from this experience that has enhanced his/her personal growth and/or career goals by May 15.

Donor(s): Harshman Fellowship Society and Pfizer Canada Inc.
Qualification(s): Full-time undergraduate students in any degree program offered by the College of Social and Applied Human Sciences and have completed at least 15 course credits with a minimum cumulative 70% average.
Amount: 1 award of $500 plus an equal amount to the charitable organization of the recipient's choice

David F. Boyes Apiculture Scholarship [I0031]
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application is not required.

Donor(s): The Apiculture Club
Qualification(s): Student registered in the Fall semester who achieves high academic standing in Introductory Apiculture ( ENVB*2210 ) in the previous year, demonstrates an interest in apiculture and who has participated in extracurricular activities.
Amount: 1 award of $200

Deans’ Scholarships [I0323]
This award was established by the Board of Governors in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.

Donor(s): Board of Governors
Qualification(s): Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.
Amount: 150 awards of $2,000

Don Posterski Memorial Travel Grant [T1105]
Established in memory of Don Posterski - a trusted advisor and friend to the Barrett Family Foundation. This travel grant recognizes Don Posterski's role and leadership in helping establish the sustainability partnership between the University and The Barrett Family Foundation. Mr. Posterski was a national Christian leader and had a distinguished career at World Vision Canada.

Donor(s): Alumni Affairs & Development - University of Guelph
Qualification(s): Students registered in International Development (CSAHS) who have completed at least 10.0 credits with a minimum cumulative average of 70 % and who demonstrates the desire and aptitude to help build capacity and address social issues in international communities and are participating in any course related international travel. Apply to CSAHS Awards committee with a letter outlining proposed travel plans and academic purpose accompanied by a letter of support from a faculty member or student in and an overall travel budget.
Amount: 1 award of $1,000

Donna Lero Scholarship in Family Services [I0976]
Established by Donna Lero upon her retirement after 42 years as a faculty member in the department of Family Relations and Applied Nutrition. Selection will be based on the most significant impact made in support of families through volunteer activities with agencies or services that support families. Apply by May 15 to the Department of Family Relations and Applied Nutrition with a letter of application outlining the impact made in support of families, including interest in pursuing a career in family services and one letter of reference supporting the impact. Students may only hold this award once.

Donor(s): Donna Lero
Qualification(s): Students registered in any major or minor offered by the Department of Family Relations and Applied Nutrition who have an interest in pursuing a career in family services, have completed a minimum of 12.5 credits and who have volunteered with agencies or services that support families.
Amount: 1 award of $1,000
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>[I0015]</th>
<th>Scholarships are awarded from funds donated from the estate of Dorothy Britton (MAC '39). Awarded on the basis of high academic achievement. Application is not required.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Donor(s):</strong></td>
<td>The Estate of Dorothy Britton</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students who have completed at least 10.0 credits in the BASc. program with a minimum cumulative average of at least 80% in the last two years of study.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>7 awards of $5,000</td>
<td></td>
</tr>
<tr>
<td><strong>Dr. James (Jim) Atkinson Scholarship [I1025]</strong></td>
<td>This award has been created through the generous contributions of many alumni and friends to recognize Dr. James (Jim) Atkinson’s influence at Guelph. As coach for over thirty years on both the men’s and women’s teams, as well as a respected faculty in the department of Animal and Poultry Science, Jim has had an impact on and off the field. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Alumni and Friends of Dr. James (Jim) Atkinson</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>One male rugby player and one female rugby player who is registered in any undergraduate program and who has achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student enrolled in the Ontario Agricultural College.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>2 awards of $1,000</td>
<td></td>
</tr>
<tr>
<td><strong>Elizabeth Landels Casselman Scholarship [I0050]</strong></td>
<td>Awarded from the estate of Elizabeth Landels Casselman, MAC '36. Apply by May 15 to Department of Family Relations and Applied Nutrition with the Department's application form and a CV with a comprehensive listing of extracurricular activities and leadership roles. Awarded in the fall semester.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Elizabeth Landels Casselman Estate</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students registered in the BASc program who have completed at least 10.0 credits, but not more than 12.5, with a minimum 80% cumulative average.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $1,500</td>
<td></td>
</tr>
<tr>
<td><strong>Evelyn Matheson Pepper Memorial Scholarship [I0538]</strong></td>
<td>The daughters, grandchildren and great grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application is not required.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Ms. Barbara Stuart and Ms. Susan Pepper</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Student who achieves the highest grade in all English courses completed. Application is not required.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $200</td>
<td></td>
</tr>
<tr>
<td><strong>Frances M. Stretton Scholarship [I0768]</strong></td>
<td>Selection will be based on significant prior contributions to and experience in community-based service. Preference will be given to students working on a project related to nutrition, food safety or sustainability within the College. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Mrs. Frances M. Stretton</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students registered full-time in any program offered by the College of Social and Applied Human Sciences with a minimum of 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the following academic year.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $5,000</td>
<td></td>
</tr>
<tr>
<td><strong>George A. Gray O.A.C. '51 Varsity Scholarships [I0487]</strong></td>
<td>Established in memory of George Gray, O.A.C. ’51, a Guelph football lineman and a great player of the game. Recipients will be selected based on demonstrated athletic and leadership qualities. Coaches will nominate students to the Athletics Awards Committee. Preference will be given to members of the varsity football team. Application is not required. Awarded in the fall semester.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Mrs. George A. Gray</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>In-course student-athlete who is a current member of a varsity team and has achieved a minimum 70% average in the previous academic year.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>2 awards of $1,250</td>
<td></td>
</tr>
<tr>
<td><strong>Gertrude R. Peterson Memorial Scholarship [I0234]</strong></td>
<td>Established by Mr. Eugene Peterson in honour of his wife, Gertrude R. Peterson, a Macdonald Institute grad from 1927. This scholarship is awarded to the student that has achieved the highest grade in the course. Application is not required.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Mr. Eugene Peterson</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Student in the BASc. program who have completed FRHD*3400, Communication and Counselling Skills.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $2,000</td>
<td></td>
</tr>
<tr>
<td><strong>Gonder Family Student Accessibility Services Volunteer Scholarship [I0563]</strong></td>
<td>In recognition of the many students who volunteer their time and talents to assist their colleagues registered with the Student Accessibility Services (SAS) and to encourage others to do so, Dr. John and Mrs. Katherine Gonder provide this award to a student who has volunteered in the SAS. The award will be made on the basis of the volunteer activities undertaken by the student at the SAS, one letter of reference, and a personal statement that outlines the time commitment and types of volunteer activities undertaken as well as an indication of how this was a valuable and rewarding volunteer experience. Apply by January 15th to the SAS (c/o Advisor to Students with Disabilities) by submitting above documentation.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Dr. John and Mrs. Katherine Gonder</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>All students registered in the College of Social and Applied Human Sciences (CSAHS) that have completed between 10.0 and 15.0 course credits with a minimum 70% cumulative average, and have been involved as volunteers with the SAS.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $750</td>
<td></td>
</tr>
<tr>
<td><strong>Governor General's Medal [C0044]</strong></td>
<td>Established by the Office of the Governor General of Canada. Application is not required.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>The Chancellery</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Restricted to those undergraduate students in any degree program who are graduating in June, or who have graduated in the previous two convocations, with the highest cumulative average.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>2 awards of a Silver medal each</td>
<td></td>
</tr>
<tr>
<td><strong>H.H. Harshman Foundation Scholarships [I0123]</strong></td>
<td>The H.H. Harshman Foundation, long time supporters of the Department of Family Relations and Applied Nutrition, provides these scholarships. Apply by letter to the Chair of Family Relations and Applied Nutrition by May 15, demonstrating leadership.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>The Harshman Foundation</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Full-time student in the BASc. program who has completed between 4.0 and 15.0 course credits. One award will be granted to a student who has completed between 8.0 and 10.0 course credits, one to a student who has completed between 12.0 and 15.0 course credits and one to a student who has completed between 4.0 and 15.0 course credits.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>3 awards of $3,000</td>
<td></td>
</tr>
<tr>
<td><strong>Harry Barrett Memorial Scholarship [I1106]</strong></td>
<td>This award was established through a gift from the estate of Mr. Harry Barrett, a graduate of OAC from 1949. Selection will be based on the highest cumulative average. Apply by May 15th to Student Finance with a written explanation of the planned experiential learning opportunity. If there are no applications by May 15th, the scholarship will be given to the student with the highest grade in ZOO*4920 in the previous Fall offering.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>The Estate of Harry Barrett</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students registered in any program who will be participating in field work related to bird studies. Preference will be given to students interested in research and/or study under the Bird Studies Canada program at their headquarters in Port Rowan, Ontario.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $1,500</td>
<td></td>
</tr>
</tbody>
</table>
Helen G. West Memorial Scholarship [10512]
Established by the family of Helen G. West, a Mac ‘30 graduate who was a member of the first University of Guelph Senate and a charter member of the University of Guelph Alumni Association. Apply by letter to the Chair of the Department of Family Relations and Applied Nutrition by May 15, including a comprehensive listing of leadership involvement in extracurricular activities.

Donor(s): Nancy Sawyer, Mary Helen Simpson, their families and Belle Shirlaw
Qualification(s): A student in any major of the BASc. program who has completed between 15.0 and 17.5 course credits with a minimum B+ (77%) cumulative average, and who has participated in extracurricular activities at a leadership level.
Amount: 1 award of $1,800

International Undergraduate Scholarship [10577]
Established through a student referendum approved by the undergraduate student body, to recognize international students’ academic merit along with involvement/leadership activities during their enrollment at the University of Guelph. Apply to Student Financial Services, by May 15, with a letter indicating involvement/extracurricular activity since entry to the University. This award can only be held once by the student.

Donor(s): International Student Organization (ISO)
Qualification(s): Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.
Amount: several at awards of $3,000

Jack and Lillian MacDonald Scholarship [E0379]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

Donor(s): Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald
Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).
Amount: 1 award of $900

Jane Collins Scholarship [I0869]
Selection will be based on demonstrated significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities. Preference will be given to students engaged in community-based or community-focused projects addressing any social, political, legal, economic or health-related aspect of poverty or its prevention. The project must be part of a course of study rather than volunteer activity. Apply to the CSAHS Awards Committee by May 15 with a summary letter outlining prior significant contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities.

Donor(s): Mrs. Jane L. Collins, MAC BHSc 1955
Qualification(s): Students registered in any program offered by the College of Social and Human Sciences who have completed 5.0 course credits and will be participating in curriculum-embedded community-based experiential learning as part of a course of study in the following year.
Amount: 1 award of $1,000

Janet M. Wardlaw Medal [C0096]
Established in honour of the many contributions of Dr. Janet M. Wardlaw, a former Dean of the College of Family and Consumer Studies. Application is not required.

Donor(s): Faculty, staff, alumni and students, formerly FACs
Qualification(s): Presented to the Department of Family Relations and Applied Nutrition’s nominee for the Winegard Medal.
Amount: 1 award of a Medal

JANET M. WARDLAW MEDAL [C0096]
Established in memory of Janet Wardlaw, the first Dean of Family and Consumer Studies (FACS). In odd numbered years, this scholarship recognizes a student registered in the Gordon S. Lang School of Business and Economics (LANG). In even numbered years, this scholarship recognizes a student registered in the College of Social and Applied Human Sciences (CSAHS). Additional preference will be given to students with experiential learning involving international travel. Apply by May 15th. In odd-numbered years, applications can be submitted to the Gordon S. Lang School of Business and Economics Awards Committee (lang.awards@uoguelph.ca). In even numbered years applications can be submitted to the College of Social and Applied Human Sciences Awards Committee. Include a one page letter outlining community-based service or extracurricular involvement demonstrating leadership skills and volunteerism. In addition, indicate if experiential learning opportunities involved international travel.

Donor(s): Class of FACS 1974
Qualification(s): Students registered in any program offered by LANG or CSAHS with a minimum cumulative average of 75% who have completed or are currently enrolled in curriculum-embedded experiential learning who demonstrates significant volunteer contribution to community-based service or extracurricular involvement.
Amount: 1 award of $1,000

Jean C. Bradley Memorial Prize [C0032]
This prize was established by the 1929 class of Macdonald Institute in memory of Jean C. Bradley, instructor of foods and cookery at Macdonald Institute. Application is not required.

Donor(s): Mac-FACS-FRAN
Qualification(s): Students that graduated in the previous fall or winter or will be graduating in the summer with the highest cumulative average in the Applied Human Nutrition major of the BASc program.
Amount: 1 award of $1,000

Jean Carter Memorial Gerontology Scholarship [I0488]
Established by the family and friends of Jean Carter, a Mac ’38 graduate who was actively involved in the life of the College and the University. Apply by May 15 to the Chair of the FRAN Awards Committee with a letter outlining volunteer experience working with the elderly, and any other extracurricular involvement. Include one letter of reference with the application demonstrating volunteer experience with the elderly. The recipient will be selected based on a commitment to the elderly as evidence through volunteer activity, involvement in extracurricular and academic achievement.

Donor(s): Mr. Robert N. Carter and Family
Qualification(s): Students registered full-time in any major within the BASc program who have completed at least 10.0 credits and have a minimum 70% cumulative average.
Amount: 1 award of $1,000

Joan (Ellerington) Tanner Memorial Prize [C0279]
Established in memory of Mrs. Joan (Ellerington) Tanner, a 1957 graduate of the Macdonald Institute to recognize the student with the highest academic standing in the final two years of study in the BASc program. Application is not required.

Donor(s): Professor J. Tanner and family
Qualification(s): Full-time students in the BASc program that is graduating in either the fall, winter or spring.
Amount: 1 award of $1,500

Joanna Bartlett Boehnert Memorial Scholarship [I0502]
Established by family, friends and colleagues of the late Dr. Joanna Boehnert, a professor in the Dept. of Psychology from 1968-2001, this award recognizes student in the college of CSAHS who demonstrate a commitment to community service. Apply to CSAHS awards committee my May 15th with a one page letter outlining your record of community service and a reference letter demonstrating commitment to community service.

Donor(s): Gunnar Boehnert, family, friends, & colleagues
Qualification(s): Students in college of CSAHS with a minimum of 10.0 credits who demonstrate a commitment to community service. Preference will be given to those with community service experience that supports women, gender equality and/or social justice.
Amount: 1 award of $1,000
IX. Scholarships and Other Awards, Bachelor of Applied Science

John Eccles Scholarship [10093]
Apply to Student Financial Services, by May 15, with a letter highlighting leadership abilities through participation on residence life. Providing a reference letter would be an asset.

Donor(s): Student Housing Services
Qualification(s): Full-time student registered in semester 2, 3, 4, 5 or 6 and living in residence in the Winter semester who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in residence related activities. Residence Life Staff and paid members of Interhall Council and Hall Councils are not eligible.

Amount: 1 award of $1,000

Katherine Fuller Scholarship [10107]
Established in 1931 to honour Mrs. Katherine Fuller, the Superintendent of Macdonald Hall from 1904 until her retirement in 1931. Apply to the FRAN Undergraduate Awards Committee by May 15 with a one-page description of contributions to student activities. The award will be given to the student who has made the greatest contribution to student activities in residence or on campus.

Donor(s): Mac-FACS-FRAN Alumni Association
Qualification(s): Full-time students registered in a program offered by the Department of Family Relations and Applied Nutrition, who have completed between 5.0 and 10.0 credits with a minimum cumulative average of 70%.

Amount: 1 award of $1,000

Ken and Marilyn Murray Scholarship [10734]
Dr. Kenneth G. Murray C.M., OAC BSA ’50 and Honourary Doctor of Laws ’96, and Mrs. Marilyn C. Murray, Mac BHSc ’55, established this scholarship. Selection will be based on significant prior contributions to and experience in community-based service. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

Donor(s): Dr. Kenneth G. and Mrs. Marilyn C. Murray
Qualification(s): Full-time students registered in the College of Social and Applied Human Sciences with a minimum 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the province of Ontario in the following academic year will be eligible for this award.

Amount: 1 award of $2,000

Kenneth W. Hammond Scholarship [10045]
Student with the highest grade in the course ENVS*2070 “Environmental Perspectives and Human Choices.” Application is not required.

Donor(s): Kenneth W. Hammond
Qualification(s): Students who have completed the course Environmental Perspectives and Human Choices ENVS*2070

Amount: 1 award of $1,000

Kevin Durie Memorial Scholarship [10653]
Established in memory of Kevin Durie, BA ’93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.

Donor(s): Christine Blake-Durie
Qualification(s): Students who are registered in any degree program on the University of Guelph campus, are a member of Residence Life staff and are academically eligible to continue as a Residence Assistant or as part of Residence Life staff.

Amount: 2 awards of $1,000

Kip Hunter Prize [10139]
For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May 1

Donor(s): Faculty, students and staff of the Philosophy Department
Qualification(s): Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.

Amount: 1 Book prize

Lambda Foundation Scholarship in LBGT Studies [10591]
This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LBGT peoples. Preference will be given to an applicant who is involved in the LBGT community as demonstrated by a record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a given student only once. Projects must have been completed or research proposals accepted within the past calendar year. Apply to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referencing involvement in the LBGT community and/or faculty support.

Donor(s): Lambda Foundation and other donors
Qualification(s): Students enrolled in a program with a thesis, a research essay, independent research project or course work programs pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.

Amount: 1 award of $1,000

Leonard Connolly Exchange Student Scholarship [10446]
Established by students, faculty, staff and friends to honour Prof. Leonard Connolly, professor of drama, Chair of the Department of Drama, 1981-88, and Associate Vice-President Academic, 1988-1992. Apply to the Centre for International Programs by April 5, for visiting during the subsequent Fall or Winter semesters. Selection, by the Centre for International Programs, will be based on assessment of (a) a one-page submission describing the significance of the student visiting Guelph to the program of study at the partner exchange university (b) two faculty references of one-page each, and (c) consistent high performance in the course work completed, as documented by a transcript of program grades to date, submitted by the home university.

Donor(s): Students, staff, faculty and friends of Dr. Leonard Connolly
Qualification(s): Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).

Amount: 1 award of $1,000

Linda S. Allen Memorial Graduation Prize [C0914]
This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medallion, on the occasion of its second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant circumstances during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).

Donor(s): Brian Allen, Family, Friends and Colleagues of Linda S. Allen
Qualification(s): Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.

Amount: 1 award of $1,000

Lynn Dibblee Robinl Scholarship [10981]
Selection will be based on the student with the most experience in the health promotion field. The current or completed experience(s) may include placements, full-time or part-time employment, summer employment or volunteer experience(s). In the event of a tie, the award will be given to the student with the highest cumulative average. Apply to the Family Relations and Applied Nutrition Awards Committee by May 15 with a resume outlining experience in health promotion.

Donor(s): Lynn Roblin
Qualification(s): Students registered in the Department of Family Relations and Applied Nutrition who have completed 13.0 – 17.0 credits with experience in the promotion of health.

Amount: 1 award of $1,000

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
IX. Scholarships and Other Awards, Bachelor of Applied Science

Mac ‘69 Memorial Scholarship [10082]
Established in 1976, by the class of Mac ‘69, in memory of classmate Patricia Cosgrove. Preference will be given to students showing general proficiency in both curricular and extracurricular work. Apply to Department of Family Relations and Applied Nutrition Undergraduate Awards Committee by May 15, including the Department Application Form and CV with a comprehensive listing of extracurricular involvement and leadership roles.

Donor(s): Class of Mac ‘69
Qualification(s): Students registered in the BASc. program who have completed 7.5 credits with a minimum 70% average and demonstrated participation in extracurricular activities and leadership roles.
Amount: 1 award of $1,500

Mac 1971 Keith and Rosalind Slater Tribute Scholarship [10830]
Established in recognition of Dr. Keith Slater, Honourary President Class for Mac ‘71, and Rosalind Slater. Selection will be based on leadership ability as demonstrated through extracurricular involvement, and/or dedication to volunteerism and community-based service in any of the following areas: family relations, applied nutrition, theatre arts, environment sciences, or children’s literacy. Apply to the CSAHS Awards Committee by May 15th with a resume and one page summary letter outlining extracurricular involvement, leadership experience, volunteerism and community-based service, as well as how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year. The award can only be held once.

Donor(s): Class of Mac 1971
Qualification(s): Full-time student registered in any major within the College of Social and Applied Human Sciences who has completed a minimum of 8.0 credits with a cumulative average of 80% and is participating in curriculum-embedded community-based experiential learning in the following academic year.
Amount: 1 award of $1,000

MAC 67 50th Anniversary Scholarship [11090]
Established by the Class of MAC 1967 in recognition of their 50th anniversary, this award recognizes students registered in any program offered by the College of Social and Applied Human Sciences who demonstrate a commitment to the well-being of families and individuals through volunteering or experiential learning. Apply to the CSAHS Awards Committee by May 15th with a one-page letter outlining volunteer and experiential learning and a reference letter demonstrating commitment to the well-being of families and individuals.

Donor(s): The Class of MAC 1967
Qualification(s): Preference will be given to students in the Department of Family Relations and Applied Nutrition. If all else considered equal, this award will go to the student with the highest cumulative average.
Amount: 1 award of $1,500

Mac-FACS-FRAN Alumni Association Scholarship - Family Relations and Applied Nutrition [10524]
Awarded to the student with the highest cumulative average. Application is not required.

Donor(s): Mac-FACS-FRAN Alumni Association
Qualification(s): Full-time student in the Department of Family Relations and Applied Nutrition who has completed between 5.0 and 10.0 credits with a minimum cumulative average of 80%.
Amount: 1 award of $1,000

Macdonald Stewart Scholarship in Memory of Walter and May Stewart [10813]
Selection will be based on significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities in the following academic year. Preference will be given to those studying in the areas of applied nutrition, sustainable food systems or environmental governance. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

Donor(s): The Macdonald Stewart Foundation
Qualification(s): Students registered in any program offered by the College of Social and Applied Human Sciences who are participating in curriculum-embedded experiential learning in the following academic year.
Amount: 1 award of $3,500

Marie-Pier Lamoureux Memorial Scholarship [10359]
Established by family and friends in memory of Marie-Pier Lamoureux-Jones, a 1988 graduate of the Applied Human Nutrition major in the BASc. program. Awarded to the student with the highest cumulative average. A student may only receive this scholarship once. Application is not required.

Donor(s): David Jones and friends
Qualification(s): Full-time students enrolled in the Applied Human Nutrition major in the BASc. program who have completed between 10.0 and 17.5 credits.
Amount: 1 award of $2,500

Morton and Pauline Schmidt Memorial Scholarship [10429]
Established by the family and friends of Morton G. and Pauline E. Schmidt of Kitchener, Ontario to recognize their appreciation of their daughters’ education at the University of Guelph. The recipient will be the student with the highest cumulative average. If two students are equally qualified, the student showing the greatest improvement in semester average will receive the Award. Application is not required.

Donor(s): Eleanor E. Wein
Qualification(s): Student registered in the Applied Human Nutrition major of the BASc. program who have completed at least 10.0 credits with a minimum 70% cumulative average.
Amount: 1 award of $1,000

Nathan Max Goldman Choir Scholarships [10774]
Established in honour of Mr. Goldman, an OAC graduate (1945 and 1947) and former President of the Philharmonia Society at the University of Guelph. The scholarships will support two students who demonstrate outstanding leadership and vision in the Symphonic Choir and/or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high musical achievement and choral leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required as a recommendation by Choir Director will be made to the SOFAM Awards Committee.

Donor(s): Mrs. Anne Goldman and the family of Nathan Max Goldman
Qualification(s): Students registered in any degree program who are currently a member of the University of Guelph Symphonic Choir and/or the Chamber Choir and have been a member of the University of Guelph Choirs for at least two years.
Amount: 2 awards of $1,000

Nick Westwood Memorial Scholarship in Spectroscopy [10982]
In recognition of Professor Nick Westwood’s enduring contributions to the field of Molecular Spectroscopy, and his devotion to academic development and achievement at all levels, his family, friends and Department of Chemistry colleagues have established this award to honour his memory. Selection will be based on the highest grade in CHEM*2070 Structure and Spectroscopy. In the event of a tie, the award will go to the student with the highest cumulative average. Application not required.

Donor(s): Staff, faculty and friends of the Department of Chemistry
Qualification(s): Students registered in any degree program with a minimum 80% cumulative average who have obtained a minimum of 80% in CHEM*2070 Structure and Spectroscopy.
Amount: 1 award of $1,000

Ontario Women’s Institute Scholarship [10160]
Offered by the Federated Women’s Institute of Ontario. Apply to the FRAN Awards Committee, by May 15 with a CV/resume and cover letter outlining involvement in extracurricular activities.

Donor(s): Federated Women’s Institutes of Ontario
Qualification(s): Residents of Ontario with a minimum cumulative average of 70% who have completed at least 4.0 credits in the BASc program and who have contributed to extracurricular activities. If other qualifications are equal, preference will be given to students who have participated in the Ontario 4-H program and/or students whose mothers are Women’s Institute members.
Amount: 3 awards of $1,000

Ottawa-Carleton ’83 International Ploughing Match (FRAN) Scholarship [10340]
Apply, by May 15, to the Department of Family Relations and Applied Nutrition with a letter outlining extracurricular activities.

Donor(s): Ottawa-Carleton International Ploughing Match Committee 1983
Qualification(s): Students from the City of Ottawa who have completed between 5.0 and 9.75 credits in the in the BASc program and who have a minimum cumulative average of 70%.
Amount: 1 award of $1,700
### Priscilla and Stanford Reid Trust Prize [I0597]

Established in honour the first chair of the History Department, Stanford Reid, and his wife, Priscilla Reid to acknowledge the best paper written about the history of Presbyterianism and/or the Reformed tradition. Apply by April 1, with a copy of the paper and a covering letter including contact information to the Department of History Awards Chair. 

**Donor(s):** Priscilla and Stanford Reid Trust Fund  
**Qualification(s):** Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.  
**Amount:** 1 award of $500

### Professional Staff Association Future Leader Scholarship [I1132]

This scholarship is provided to students whose leadership involvement makes a positive impact at the University of Guelph and/or the broader community. Apply by email to awards@uoguelph.ca by May 15 with a personal statement (max 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average will be awarded. This award may not be held more than once.

**Donor(s):** Professional Staff Association (PSA)  
**Qualification(s):** Students registered in any program who demonstrate involvement in leadership opportunities that result in positive community impact, and who are from the immediate family of full-time, part-time, contractual or retired members of the Professional/Managerial Group at the University of Guelph. Preference will be given to a student that has not received the Professional Staff Association Scholarship in the same year.  
**Amount:** 1 award of $1,500

### Professional Staff Association Scholarship [I0628]

This scholarship is provided to students with the highest cumulative average. Apply to Student Financial Services by May 15 by sending an email to awards@uoguelph.ca and include the name of the family member of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. This award may be held more than once, however, not in consecutive years. Preference will be given to students of current or retired P.S.A. members. Selection will be based on highest cumulative average.

**Donor(s):** Professional Staff Association  
**Qualification(s):** Full-time students who are from the immediate family, part-time or contractual Professional/Managerial Group employees of the University of Guelph who have completed at least 5.0 credits and have a minimum 70% cumulative average.  
**Amount:** 1 award of $1,500

### Project Hero Scholarship [I0979]

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarships or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent's full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph  
**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.  
**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

### Scotiabank Scholarships in Leadership [I0834]

Apply to the Department of Management Awards Committee by May 15 with: 1) A 500 word personal statement describing the impact of their leadership practice in a non-profit setting including the benefits both to the student and to the organization; 2) Reference letter(s) from the organization(s) in which the leadership practice took place. In the event of a tie, the award will go to the student with the highest cumulative average. Please submit your application by email to: dom.awards@uoguelph.ca.

**Donor(s):** Scotiabank  
**Qualification(s):** Students who have completed the Foundations of Leadership course (HROB*2010) and either completed the required 120 hours of leadership practice for the undergraduate Certificate in Leadership in a non-profit setting or are registered in the Leadership and Organizational Management major of the BComm program and have demonstrated exceptional leadership in a non-profit setting.  
**Amount:** 5 awards of $1,000

### Sister Mary Frederick Sheehan Prize [C0216]

Established by the Ontario Dietetic Association Public Service Foundation in memory of the humane and professional leadership shown by Sister Mary Frederick Sheehan through her work at St. Michael's Hospital, Toronto. The recipient will be the student with the highest academic standing. Application is not required.

**Donor(s):** The Ontario Dietetic Association Public Service Foundation  
**Qualification(s):** Students graduating from the Applied Human Nutrition major of the BASc. program who have been accepted a dietetic internship.  
**Amount:** 1 award of $500

### Sports Media and Sports Broadcasting Scholarships [I1035]

Apply by May 15th to Student Financial Services by submitting a one page letter outlining sports media or sports broadcasting experience in the past year. Letters can be emailed to awards@uoguelph.ca. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minoring in Media and Cinema Studies and who have the highest GPA.

**Donor(s):** Rogers Media Inc.  
**Qualification(s):** Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas. To be awarded to an undergraduate student first, then to a graduate student if no undergraduate students apply.  
**Amount:** 2 awards of $2,500
### Stephanie Wilken Volunteer Scholarship [I0449]
**Established by the Wilken family in memory of Stephanie Wilken, BA 1995. Apply to Student Financial Services with letter indicating the kind and extent of volunteer activities at the Wellness Centre by October 1. Selection committee is the Senate Committee on Awards on the recommendation of the Student Wellness Educator at the Wellness Centre.**

| Donor(s): | Bev and Darlene Wilken |
| Qualification(s): | Student required, pursuing any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre. |
| Amount: | 1 award of $1,000 |

### Summerlee Humanitarian Scholarships [I0964]
The **Summerlee Humanitarian Scholarships** are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues of global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a varsity athlete (varsity athletes should self-identify in their letter). While applicants who demonstrate past significant impacts in improving local communities/groups will be considered, preference will be given to applicants with strong previous proven international humanitarian efforts. Recipients must adhere to the University of Guelph’s Safe Travel Policy.

| Donor(s): | The Angel Gabriel Foundation |
| Qualification(s): | Students registered in any program with no more than 17.0 credits completed who have demonstrated a commitment to humanitarian efforts including but not limited to those affecting refugees, displaced persons, and populations affected by conflict and natural disasters through volunteer positions, prior employment and/or extra-curricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues. |
| Amount: | 5 awards of $10,000 ($5,000 in each of the fall and winter semesters) plus an additional up to $4,000 to support travel costs |

### Syer- Torrence Family Scholarship [I1072]
**Established by Dr. Ken Torrance OAC BSA1963 and Mrs. Margaret Torrance MAC BHSc 1962 for undergraduate scholarship for full time students registered in the BASc program in CSAHS who have completed at least 10.0 credits with a cumulative average of 77%. Students must be taking part in curriculum-embedded experiential learning. Selection will be based on leadership ability as demonstrated through extracurricular involvement or dedication to volunteerism and community-based service during your undergraduate studies. Apply to the CSAHS Awards Committee by May 15 with an application form accompanied by a letter outlining previous involvement in community or campus based service and a budget stating how the funds will be used to support curriculum embedded experiential learning.**

| Donor(s): | Dr. Kenneth and Mrs. Margaret A. Torrence |
| Qualification(s): | Full-time student registered in the BASc program in CSAHS who have completed at least 10.0 credits with a cumulative average of 77%. Students must be taking part in curriculum-embedded experiential learning. Selection will be based on leadership ability as demonstrated through extracurricular involvement or dedication to volunteerism and community-based service during your undergraduate studies. |
| Amount: | 1 award of $1,000 |

### Thomas H. Peters Scholarship [I0233]
**Application is not required.**

| Donor(s): | Friends and associates of Thomas H. Peters |
| Qualification(s): | Student in any academic program of the University who has completed courses in Land Reclamation (e.g. CROP*2280, SOIL*3200), with a minimum 10.0 credits completed. Applicants must have a minimum of 70% cumulative average and have demonstrated an interest and aptitude in the area of crops and land reclamation. |
| Amount: | 1 award of $500 |

### United Steelworkers Local 4120 Scholarship [I0293]
**Apply to Student Financial Services by January 31 and provide the name of the USWA member and relationship to the applicant. If there is more than one eligible candidate, the award will go to the one who has attained the highest relative class standing in his or her previous full-time semester.**

| Donor(s): | United Steelworkers LU4120 |
| Qualification(s): | Student who is a member or former member, or who is from the immediate family of a member of United Steelworkers LU 4120, and who is entering semester 2, 3, or 4 of a degree or diploma program in the Winter semester with a minimum 70% cumulative average. |
| Amount: | 1 award of $1,000 |

### University of Guelph Alumni Legacy Scholarship [I0735]
**Funded through donations made to the University of Guelph Alumni Memorial Fund in memory of deceased alumni. The recipient will be selected based on academic achievement and volunteer contributions to the University of Guelph community. Apply to Student Financial Services by May 15 with a cover letter indicating name, degree and year of graduation of alumna/alumnus relative and a resume or summary of leadership and volunteer contributions to the University of Guelph community.**

| Donor(s): | Various donors c/o University of Guelph Alumni Association Memorial Fund |
| Qualification(s): | Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with both a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumna/us of the University of Guelph or its founding colleges. |
| Amount: | 1 award of $1,000 |
### IX. Scholarships and Other Awards, Bachelor of Applied Science

#### University of Guelph Retirees Association Scholarship [I0569]
- Established in 2007 to acknowledge in-course student achievement. The student having the highest cumulative average will be selected and in the event of a tie, the student with the highest average in the last two semesters of full-time studies will be chosen. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca.
- **Amount:** 1 award of $2,000
- **Qualification(s):** Students registered in any program who have achieved a minimum of 3 and 10 credits at the time of application for the award.
- **Donor(s):** University of Guelph Retirees Association (U.G.R.A.)

#### Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]
- The scholarship will be awarded to the student who has demonstrated academic achievement and exemplary leadership. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca.
- **Amount:** 1 award of $2,000
- **Qualification(s):** Full-time students registered in the BASc program who have completed between 2.5 and 7.5 credits.
- **Donor(s):** Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoeven & family

#### Virginia Campbell Scholarship [I1141]
- The scholarship honours Virginia Campbell, academic assistant to the Dean of the College of Family and Consumer Studies, who was selfless and genuine in her care and support of students. Selection will be based on the greatest demonstrated positive impact on the community through volunteering or extra-curricular activity. Students can apply to the Family Relations and Applied Nutrition Awards Committee by May 15 with an application form accompanied by a summary letter outlining contributions made through volunteering or extra-curricular activity and the impact on the community.
- **Amount:** 1 award of $1,000
- **Qualification(s):** Students registered in any major in the Department of Family Relations and Applied Nutrition who have completed between 12.0 and 15.0 credits and have made a significant impact on the community through their volunteer or extra-curricular activity on or off campus are eligible.
- **Donor(s):** Mr. Bernard A. Ward

#### W.C. Winegard Medal [C0311]
- The W.C. Winegard Medal is the most prestigious and top convocation award presented to an undergraduate student at the University of Guelph. Named for former University President Dr. William Winegard, the medal is awarded in recognition of both academic achievement and contributions to the university and community life. One student will be nominated by each College Awards Committee. The Senate Honours and Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application is not required.
- **Amount:** 1 award of a Gold medal
- **Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations who excel both academically and in contributions made to the university and community life.
- **Donor(s):** The Board of Governors’ of the University

#### W.N. Vaughan Medal [C0299]
- A medal may be granted annually to a student senator who has high academic standing and who has made a substantial contribution to student life and to the university, particularly through involvement in and commitment to Senate activities. Prospective candidates will be nominated by senators and the medal winner will be chosen by a committee selected by the Senate Bylaws and Membership Committee. The medal will be awarded at June convocation. No application is necessary.
- **Amount:** 1 award of a Medal
- **Qualification(s):** Student senator who has high academic standing and who has made a substantial contribution to student life and to the University, particularly through involvement in and commitment to Senate activities.
- **Donor(s):** Friends of Walter N. Vaughan

### In-course Scholarships with Financial Need

#### Barbara A. Bowen Scholarship [I4390]
- Established by Barbara A. Bowen, MAC ’57. Preference will be given to students registered in Department of Family Relations and Nutrition. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.
- **Amount:** 1 award of $5,500
- **Qualification(s):** Students who have a minimum 75% average and are registered in any degree program in the College of Social and Applied Human Science with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
- **Donor(s):** Barbara A. Bowen with matching funding through the Ontario Trust for Student Support program

#### Brian Kenneth Howard Memorial Scholarship [I4548]
- Established by Kenneth and Irene Howard in memory of their son, Brian Kenneth Howard. Awarded to a student assessed as having financial need with a preference given to students from York, Durham or Simcoe counties. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.
- **Amount:** 1 award of $3,000
- **Qualification(s):** Students registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
- **Donor(s):** Kenneth and Irene Howard with matching funding through the Ontario Trust for Student Support program

#### City of Guelph 175th Anniversary Scholarship [I0515]
- Funded by a leadership gift from the City of Guelph and donations from business and community leaders, this scholarship was established in 2002. Apply to Student Financial Services by October 7 with a letter describing volunteer activities, one reference letter from an individual familiar with the volunteer and/or community service contributions, and a completed Financial Need Assessment Form (N.A.F.). Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need. This award may be held only once.
- **Amount:** 1 award of $2,000
- **Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70.0% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.
- **Donor(s):** The Guelph Community Foundation
Class of Mac 1968 Scholarship [10929]

A 50th anniversary legacy project by the MAC 1968 graduating class, this bursary is part of the Learning Opportunities Trust and supports a student who is participating in leadership opportunities outside of the classroom. Selection will be made based on financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a letter outlining volunteer initiatives.

Donor(s): Class of Mac 1968
Qualification(s): Students registered in the Bachelor of Applied Sciences program who have completed at least 10.0 credits, have volunteered on campus and/or in the community and who have demonstrated financial need.

Amount: 1 award of $2,000

Eleanor Morgan & Bill Archibald Scholarships [14540]

The family of Eleanor and Bill Archibald, with the assistance of the Ontario government’s OSOTF program, provide this scholarship in memory of their parents. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining community involvement to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): The Family of Eleanor & Bill Archibald with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any program with a minimum of 5.0 credits who have completed at least 10.0 credits, have volunteered on campus and/or in the community and who have demonstrated financial need.

Amount: 1 award of $2,500

Erin Demers Memorial Scholarship [10406]

The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.), along with one supporting reference letter from a Residence Assistant, Residence Manager, or Residence Officer.

Donor(s): Family and friends of Erin Katrina Demers
Qualification(s): Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

Amount: 1 award of $1,800

Euclid-Hitachi Scholarships [14517]

Established by Euclid-Hitachi of Canada Ltd., with the assistance of the Ontario government's OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,500

FACS ’85 Heritage Scholarship [14537]

Established by the Class of FACS ’85, with the assistance of the Ontario government's OSOTF program. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.) and include a letter outlining the extent of community volunteerism or involvement in an on-campus student club, particularly as it relates to your area of study. To be considered for this award, you must list it on your N.A.F. ACCESS AWARD.

Donor(s): The Class of FACS ’85 with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students enrolled in the BASc program who have completed at least 10.0 course credits with a minimum 70% cumulative average and have a record of community and/or on-campus student club involvement. Preference will be given to the student who has been involved with community volunteerism or an on-campus student club related to his or her area of study. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $650

Graham Family Incentive Scholarship [14506]

Provided by Harvey Graham (O.A.C. ’39) with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD

Donor(s): Harvey Graham O.A.C. ’39 with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students entering the fourth year of a four year degree program, maintaining at least a 70% program average and demonstrating financial need, who have previously received the Harvey Graham Bursary. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $6,000

Guelph Campus Co-operative Centennial Scholarship [10867]

In recognition of the Guelph Campus Co-operative’s centennial anniversary and the students who founded it, this scholarship is awarded to a student who has demonstrated financial need. Preference will be given to students who are members of the Guelph Campus Co-operative. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form and a photocopy of your valid co-operative membership card.

Donor(s): Guelph Campus Co-operative
Qualification(s): Students registered in any program at the University of Guelph who have completed a minimum of 5.0 credits with a minimum cumulative average of 75% and have demonstrated financial need.

Amount: 1 award of $1,000

Helen G. West ACCESS Scholarship [14391]

Provided by the family of Helen G. West, a Mac ’30 graduate who was a member of the first University of Guelph Senate and a charter member of the University of Guelph Alumni Association, with the assistance of the Ontario government’s OSOTF program. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining the extent of involvement in extracurricular activities. To be considered for this award, you must list it on your N.A.F. ACCESS AWARD

Donor(s): Nancy Sawyer, Mary Helen Simpson, their families, and Belle Shirlaw with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): A student in any major of the BASc program who demonstrates financial need and who has completed at least 10.0 course credits with a cumulative average of at least 70%. Preference will be given to students who have participated with extracurricular activities. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $1,200

Kathleen and R. Douglas Kennedy Scholarship in CSAHS [10546]

Kathleen (MAC ’39) and Douglas (O.A.C. ‘39) Kennedy met at a “hop” on campus in 1937 and later married. They established this scholarship to celebrate their time on campus and their 62 years of marriage. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). This scholarship will be awarded to a student in CSAHS with high academic achievement with financial need. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy
Qualification(s): Students registered in the Department of Family Relations and Applied Nutrition with a minimum cumulative average of 70% and demonstrated financial need.

Amount: 1 award of $1,500

MAC 1954 Scholarship [10911]

Preference will be given to students registered in the department of Family Relations and Applied Nutrition. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): Class of MAC 1954
Qualification(s): Students registered in any degree program offered by the College of Social and Applied Human Science with a minimum 75% average with demonstrated financial need.

Amount: 1 award of $1,500
Mrs. Elsa Hevenor Stewart Scholarships [10271]
Endowment fund provided by the estate of Mrs. Elsa H. Stewart, formerly of Pakenham, Ontario. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Selection will be based on the greatest demonstration of financial need.

Donor(s): The Estate of Elsa Hevenor Stewart
Qualification(s): Students registered in the BASc. program who have completed at least 15.0 credits but no more than 17.5 credits with demonstrated financial need.
Amount: 2 awards of $1,000

Residence Life Staff Scholarship [10697]
Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date.

Donor(s): Student Housing Services
Qualification(s): Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program.
Amount: 2 awards of $500

Returning Student Residence Scholarship [10696]
Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must have resided in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award.

Donor(s): Student Housing Services
Qualification(s): Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average.
Amount: 3 awards of $500

Tara Lynn Giuliani Memorial Scholarship [10375]
Awarded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form. Selection is based on financial need.

Donor(s): Tara Lynn Giuliani Foundation at the Hamilton Community Foundation
Qualification(s): Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services and who have demonstrated financial need. Preference given to students with a visual impairment.
Amount: 1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000

Walter and Marion MacDougald Scholarship [14530]
Established by the family of Walter and Marian MacDougald on the 50th wedding anniversary of their parents, in recognition of their gift of life-long learning to their five children, with the assistance of the Ontario government's OSOTF program. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter that includes a statement that outlines your interests in food supply, utilization, farmland conservation or woodlot management. Preference will be given to students enrolled in a program involved in food supply or utilization, farmland conservation or woodlot management. ACCESS AWARD.

Donor(s): Doug MacDougald, D.V.M. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students demonstrating financial need with a minimum of 10.0 credits and less than 15.0 credits and who are in the following programs/majors/minors: BASc, BSc(Agr), BSc(Env), BSc(Food Science, Animal Biology, Nutrition, or Forest Science), or D.V.M., having a minimum cumulative average of 70%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $2,400

William & Nona Heaslip Scholarship [10589]
Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): The William and Nona Heaslip Foundation
Qualification(s): Students that have completed 4.0 credits but no more than 6.0 credits in any degree program; are a Canadian citizen/permanent resident; have a minimum 70% cumulative average; and demonstrate financial need.
Amount: 2 awards of $15,000

Yeandle Family Scholarships [13546]
Provided by the Estate of Audrey Yeandle, a Mac’25 graduate and life-long supporter of the University, with the assistance of the Ontario government’s OSOTF program. Awards will be made on the basis of financial need and academic achievement. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): The Estate of Audrey Yeandle with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in a program in the College of Social and Applied Human Sciences with a minimum cumulative average of 70%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards up to $2,000

In-course Bursaries

Acer Saccharum Bursary [13083]
Applying for this award requires full-time registered students to submit an application form and confirmation of registration with Student Accessibility Services.

Donor(s): Steven Ardron and Celine Batterink
Qualification(s): Students registered in the program at the University of Guelph, who have demonstrated financial need and are registered with Student Accessibility Services.
Amount: 1 award of $1,000

Archie and Isabelle (Cook) Rintoul Bursary (FRAN) [13018]
Offered by Archie, OAC ’26, and Isabelle (Cook), MAC ‘27, Rintoul. Apply with a completed Financial Need Assessment Form (N.A.F.) by October 7 to Student Financial Services. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Archie and Isabelle (Cook) Rintoul
Qualification(s): Students who have completed a minimum of 7.75 credits in a program offered by the Department of Family Relations and Applied Nutrition (F.R.A.N.) and who have demonstrated financial.
Amount: 1 award of $1,000
### Brinson Partners Inc. Bursaries [I3526]

Brinson Partners Inc., with the assistance of the Ontario government's OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**ACCESS AWARD.**

**Donor(s):** Brinson Partners Inc. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

### Burnbrae Farms Bursaries [I3525]

Established by Burnbrae Farms, with the assistance of the Ontario government's OSOTF program to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement explaining interests in poultry science to Student Financial Services by October 7.

**ACCESS AWARD.**

**Donor(s):** Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science.

Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,000

### Campbell-Ouellette Family Bursary [I3098]

Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family's broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Dr. Malcolm Campbell

**Qualification(s):** Students registered in any program with demonstrated financial need.

**Amount:** 1 award of $2,000

### Class of '72: 25th Reunion Bursaries [I3512]

Established by the Class of '72: 25th Reunion Fund with the assistance of the Ontario government's OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**ACCESS AWARD.**

**Donor(s):** Class of '72: 25th Reunion with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 awards of $1,000

### David Havoic Bursary [I3087]

Established by the Havoic family, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to the student with the greatest financial need. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and attach a letter from Student Accessibility Services confirming registration and physical disability.

**Donor(s):** Debbie and David Havoic

**Qualification(s):** Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.

**Amount:** 1 award of $1,000

### David R. Leach Memorial Bursary [I3534]

Provided in memory of David R. Leach by his family, with the assistance of the Ontario government's OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. 73 and graduated with a B.S. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7.

**ACCESS AWARD.**

**Donor(s):** Mrs. Deborah Leach-Saitor with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students who are physically disabled as determined by the Student Accessibility Services with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,000

### Denis and Patricia Yates Bursary [I3097]

Established by Charlotte Yates in memory of her parents who were strong advocates for the value of education in society. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Dr. Malcolm Campbell

**Qualification(s):** Students registered in any program with demonstrated financial need.

**Amount:** 1 award of $2,000

### Donna Demerling-Pree Bursary [I3082]

Established by Mrs. Donna Pree, Mac BHSc 1967, for first generation students registered in any program offered by the College of Social and Applied Human Sciences. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form and a statement identifying as a first-generation student.

**Donor(s):** Mrs. Donna Pree, Mac BHSc 1967

**Qualification(s):** students registered in any program offered by the College of Social and Applied Human Sciences with demonstrated financial need and a minimum of 10.0 completed credits. Preference will be given to students registered in BASc. With a major in Applied Human Nutrition or BASc. With a major in Child, Youth and Family.

**Amount:** 1 award of $1,000

### Elizabeth Burton Bursaries [I3503]

Mrs. Elizabeth Burton, with the assistance of the Ontario government's OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**ACCESS AWARD.**

**Donor(s):** Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

### George and Margaret J. Miles Memorial Bursary [I3544]

Established by the family to honour the memory of the parents, George and Margaret J. Miles, life long supporters of education. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter describing involvement in extra-curricular activities to Student Financial Services by October 7.

**ACCESS AWARD.**

**Donor(s):** Established by the Miles Family with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in BASc. With a major in Human Nutrition or BASc. With a major in Child, Youth and Community, etc. with a cumulative average of 75% or better and at least a minimum of 10.0 completed credits. Preference will be given to students registered in BASc. With a major in Applied Human Nutrition or BASc. With a major in Child, Youth and Community, etc. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $2,000

### Gryphon Investment Council Bursaries [I3513]

Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**ACCESS AWARD.**

**Donor(s):** Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500
IX. Scholarships and Other Awards, Bachelor of Applied Science

Guelph Compassionate Health and Dental Bursary [I3061]

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph’s mandatory Student Health Plan, University of Guelph’s Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment form; (2) a letter from physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and its impact on the student’s studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) Insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

Donor(s): Student Health and Dental Plan Reserve
Qualification(s): Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student’s academic progress.

Amount: Several awards of various amounts to a maximum of $1,500

Guelph Student Assistance ACCESS Bursaries [I3556]

These bursaries have been established and approved by undergraduate students through student referendum with the aid of the Ontario government’s OTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Access Award

Donor(s): Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: Several awards of varying amounts up to $1,000

Guelph Student Assistance Program [I3056]

These bursaries have been established and approved by undergraduate students through student referendum to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): Undergraduate Students
Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need.

Amount: Several awards of varying amounts up to $1,000

Helen Mahon Memorial Bursary [I3063]

Established in memory of Helen Mahon, a longtime employee of the University of Guelph and who, following the death of her husband, raised three young children alone, all of whom graduated from university. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a statement that indicates you meet the criteria of this bursary. Awarded in the winter.

Donor(s): Family and Friends of Helen Mahon
Qualification(s): Students registered in any program who come from a family where one parent is deceased.

Amount: 1 award of $500

Howard and Myrtle Rogers Bursaries [I3537]

Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Access Award

Donor(s): The Estate of Howard and Myrtle Rogers with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate on-going financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 10 up to $2,500

Indigenous Student Bursary [I3068]

In 2009, the Ministry of Advanced Education and Skills Development established the this Bursary as part of their new Aboriginal post-secondary education funding initiative. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with financing their education. Apply to Student Financial Services by October 7th with a Financial Need Assessment Form and complete the Indigenous Student Bursary application. Selection is based on financial need.

Donor(s): Ministry of Advanced Education and Skills Development (MAESD)
Qualification(s): Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP), and have demonstrated financial need.

Amount: several awards ranging in values from $1,000 to $3,500

International Emergency Medical Aid Assistance [I3059]

The University of Guelph provides support to international undergraduate students that are faced with unexpected, or unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an on-going basis.

Donor(s): University of Guelph
Qualification(s): International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.

Amount: Several awards of varying amounts

Irvine and Grace Black Memorial Bursary [I3051]

Established in memory of Irvine and Grace Black, by friends and family to recognize their many contributions to young people. Irvine, a well-known sheep breeder, was a judge at College Royal and the Royal Winter Fair for over fifty years, and Grace was active in the Women’s Institute and the Fergus Fall Fair. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining involvement in the 4-H Club and/or a Women’s Institute by October 7.

Donor(s): Family and friends of Irvine and Grace Black
Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to applicants who are, or have been, active in the 4-H Club and/or a Women’s Institute.

Amount: 1 award of $500

Ivey Cook Bursaries [I3076]

Apply to SAS using the “New Student Intake Form” and a letter explaining your situation and attach documentation showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first come first served basis, based on the validity and need for an assessment.

Donor(s): Suzanne Ivey Cook
Qualification(s): Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment.

Amount: several awards of up to $1,000

2019-2020 Undergraduate Calendar
Joyce Barclay-Ogden Bursary [I3074]
Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Joyce Ogden  
**Qualification(s):** Students registered in any program in the College of Social and Applied Human Sciences with demonstrated financial need.  
**Amount:** 1 award of $1,000

Madison Gough Memorial Bursary [I3103]
Established by the friends and family of Madison Gough, a gentle, kind spirit who was inspired by nature, animals, or music and passionate about acceptance of difference. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Bob Gough and Laura Ladouceur  
**Qualification(s):** Students registered in any program who have demonstrated financial need.  
**Amount:** 1 award of $1,000

Marie Hardacre Bursary [I3548]
Established by Mrs. A. Marie Hardacre, MAC DHE 1930 for students in CSAHS with a preference to female students registered in the Department of Family Relations and Applied Nutrition. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Mrs. A. Marie Hardacre with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students registered in any academic program in the College of Social and Applied Human Sciences with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** 1 award of $5,000

Mary L. Whitelock Bursaries [I3524]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Estate of Mary L. Whitelock with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** 13 awards of $2,000

Métis Nation of Ontario Bursary [I3092]
The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and a statement confirming Métis status and include your card number.

**Donor(s):** Métis Nation of Ontario  
**Qualification(s):** Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.  
**Amount:** 1 award of $1,000

Mildred Taylor Misener Bursaries [I3012]
Dr. Andrew Grant Misener, an alumnus of the University of Guelph, has provided this endowment fund. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form (N.A.F). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Dr. Andrew Grant Misener, President of Friends of the University of Guelph, Inc.  
**Qualification(s):** Students in the BASc. program with established financial need.  
**Amount:** Several varies

Norma Valeriote International Student Bursaries [I3009]
Preference given to a student from a country of focus as defined by CIDA (Canadian International Development Agency). Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.

**Donor(s):** Mrs. Norma L. Valeriote  
**Qualification(s):** International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.  
**Amount:** Several of varying amounts

Ontario First Generation Bursary [I3062]
The Ministry of Advanced Education & Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.

**Donor(s):** Ministry of Advanced Education & Skills Development (MAESD)  
**Qualification(s):** Students registered in any program who are first generation students, Ontario residents (as defined by OSAP) and who have demonstrated financial need.  
**Amount:** several awards ranging in values from $1,000 to $3,500

Robert Auger Humanitarian Bursary [I3058]
Established in memory of Bob Auger, a former Associate Registrar at the University of Guelph. It is intended as an emergency fund to assist students who unexpectedly find themselves in difficult financial situation who could benefit from receiving a grocery voucher. To be considered, students must have completed a Financial Aid Assessment form and arrange an appointment with a Financial Aid Counsellor. Appointments can be made by calling 519-824-4120 extension 58715.

**Donor(s):** Family and friends of Robert Auger  
**Qualification(s):** Students registered in any degree program with an unexpected financial emergency.  
**Amount:** Several grocery vouchers or book vouchers

Scotiabank Bursaries [I3532]
Established by Scotiabank, with the assistance of the Ontario government's OSOTF program, to assist students with financial need to continue their studies as full-time students. Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Scotiabank with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** 2 awards of $1,500

Shirley Endean Bursaries [I3570]
These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Estate of Shirley E. Endean & multiple donors with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** Several awards of varying amounts

Stoney Creek Women's Institute Bursaries [I3017]
Established by the Stoney Creek Women's Institute to commemorate the Sixtieth Anniversary of its founding. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form (N.A.F). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Stoney Creek Women's Institute  
**Qualification(s):** Students from the region of Hamilton-Wentworth and registered in the BASc. program with demonstrated financial need.  
**Amount:** 1 award of $300
### Student Financial Services Bursaries [I3107]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards up to a maximum of $6,000

### Tony and Nan Legris Bursary [I3072]

Established by Rosemary Legris in memory of her parents, Tony and Nan Legris. Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Rosemary Legris  
**Qualification(s):** Students registered in any program in the College of Social and Applied Human Sciences with demonstrated financial need.

**Amount:** 1 award of $1,200

### Uffelmann Connor Family Bursary for Indigenous Students [I3109]

Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Métis or Inuit).

**Donor(s):** Maris Uffelmann and Dean Connor  
**Qualification(s):** Students registered in any program who self-identify with First Nations (Status and non-Status), Métis or Inuit ancestry and who demonstrates financial need.

**Amount:** 1 award of $1,000

### Uffelmann Connor Family First Generation Bursary [I3108]

Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as a first-generation student.

**Donor(s):** Maris Uffelmann and Dean Connor  
**Qualification(s):** Students registered in any program who is a first-generation student (First generation students (parents did not attend post-secondary studies, full-time or part-time, in or outside Canada at any time or in any program) registered in any program with demonstrated financial need. and who demonstrates financial need.

**Amount:** 1 award of $1,000

### University of Guelph Access Bursaries [I3522]

Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Alumni and Friend of the University of Guelph with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of $500. Several awards of $2,000

### University of Guelph Alumni Association Access Bursaries [I3523]

Established by the University of Guelph Alumni Association, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** University of Guelph Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,250

### University of Guelph International Bursary [I3048]

The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Students should apply to the International Student Advisor by Nov. 1 for the fall semester, March 1 for the winter semester, and July 2 for the summer semester with a completed International Student Financial Need Assessment Form (N.A.F.). If students have an emergency situation, please contact the International Student Advisor, in Student Life, University Centre, Level 3.

**Donor(s):** University of Guelph  
**Qualification(s):** International students registered in a degree program who have completed a minimum of 4.0 credits and are registered in a minimum of 1.5 course credits.

**Amount:** Several varies

### University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [I3047]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards to a maximum of $2,000

### University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards up to a maximum of $6,000

### University Student Assistance Program [I3057]

These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).

**Amount:** Several awards of various amounts to a maximum of $1,000
Bachelor of Arts

Please refer to the General Statement on Awards for:
• Award Eligibility
• ACCESS Awards Eligibility
• Ontario Student Opportunity Trust Fund (OSOTF) Program
• How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

Entrance Scholarships

Alumni Entrance Merit Scholarship, College of Arts [E0477]
Established the College of Arts and the Development and Public Affairs Office. Application is not required.
Donor(s): Development and Public Affairs Office
Qualification(s): Student entering the B.A. program in the College of Arts in the Fall semester with the highest admission average.
Amount: 1 award of $1,000

Amos & William Lowe Memorial Scholarship [E0158]
Endowed by the late William B. Lowe of Fort Francis, Ontario. Preference will be given first to eligible students from the district of Rainy River, then from the district of Kenora or Thunder Bay, and finally from the remaining districts of Northern Ontario. Application is not required.
Donor(s): William B. Lowe and Amos Edgar Lowe
Qualification(s): Student entering any of the undergraduate degree programs of the Ontario Agricultural College.
Amount: 1 award of $2,000

Angelo and Frank Agro Undergraduate Scholarship [E0520]
These scholarships are provided by the Agro Scholarship Fund. Apply, by April 15, to Student Financial Services (awards@uoguelph.ca), with a one to two-page, point-form listing of 4-H activities. This list should describe current or past activities within 4H and the position titles/names, if applicable. Attach a reference letter from a 4H club official.
Donor(s): The Frank Agro Estate
Qualification(s): Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10-4H projects.
Amount: 7 awards of $7,000 (payable over 4 years of study)

Atkinson Family Scholarship [E0972]
Established by the Atkinson Family in honour of Walter McFee and Johnny Atkinson for their passion for farming, family and community. Selection will be based on highest admission average. No application required.
Donor(s): Amy and Bryan Atkinson
Qualification(s): Students entering any degree program offered by the Ontario Agriculture College (OAC).
Amount: 1 award of $1,000

Authier/Golland Scholarship in Studio Art [E0932]
Established by Melanie Authier, MFA '06, and Martin Golland, MFA '06 and awarded to the student with the highest admission average. Application is not required.
Donor(s): Melanie Authier & Martin Golland
Qualification(s): Students entering the Bachelor of Arts program with a major in Studio Art (SART).
Amount: 1 award of $1,000

December 6th Memorial Scholarship [E0005]
This scholarship is established in memory of the fourteen women murdered in December 1989 at Ecole Polytechnique and is intended to attract women to a profession that is largely comprised of men. The recipient will be selected on the basis of academic performance. For continued eligibility beyond semester 1, the student must maintain a minimum of 70% cumulative average and full-time studies. Application is not required.
Donor(s): University of Guelph Faculty Association
Qualification(s): Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Engineering and Physical Sciences.
Amount: 1 award of $2,250 ($750 in each of semesters 1, 3 and 5).

Dr. William Winegard Scholarship in International Development Studies [E1142]
Established by former President of the University of Guelph, Dr. William Winegard (Bill), who was an enthusiastic supporter of international development studies here on campus. The Dr. William Winegard Scholarship in International Development supports undergraduate students at the Guelph Institute of International Development Studies (GIDS) and continues his legacy of internationalization and impact on students of today for a better tomorrow. The award will be given to the student who has achieved the highest admission average.
Donor(s): Dr. William Winegard
Qualification(s): Student entering the Bachelor of Arts program with a major in International Development.
Amount: 2 awards of $2,500

Dr. C. John Small Commonwealth Scholarship [I0611]
Established in honour of Dr. C. John Small, OAC BSA '42, Hon D. Law '75, and his lifelong dedication to foreign service. Selection will be based on the assessment of: (a) a one-page submission describing the significance for the student visiting Guelph to the program of study at the partner exchange University, (b) two faculty references of no more than one-page each, and (c) consistent high performance in course work completed, as documented by a transcript of program grades to date. Apply to the Centre for International Programs by May 1 for visiting during the subsequent Fall or Winter semesters with the above mentioned documents.
Donor(s): Mrs. Jean K. Small
Qualification(s): Full-time visiting exchange students registered for at least one semester from a Commonwealth developing country who are pursuing studies or conducting research in the area of agriculture and rural development.
Amount: 1 award of $1,500
IX. Scholarships and Other Awards, Bachelor of Arts

Dr. Frederick and Mrs. Mabel Hung Memorial Scholarships [E0320]
The colleagues and family of the late Prof. Frederick Hung make available this scholarship to encourage students to major in Geography. The award will be given to the student who has achieved the highest admission average. The scholarship is not tenable with any other University of Guelph entrance awards greater than $5000. Application is not required.

Donor(s): The family and friends of Dr. Frederick Hung
Qualification(s): Student entering the Bachelor of Arts program with a major in Geography.
Amount: 1 award of $700

Dr. Jack Britney Scholarship [E0034]
Established in memory of Dr. Jack Britney, a graduate of ’57A and O.A.C. ’60 and former faculty member in the former School of Food Agriculture and Resource Economics and Extension Education. Selection will be based on the students entering with the highest admission average. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a statement indicating the program and where the Diploma was taken and when.

Donor(s): Friends and Associates
Qualification(s): Students entering any OAC degree program with a preference given to students who graduated from any University of Guelph Associate Diploma program.
Amount: 1 award of $1,750

Earl B. MacNaughton Entrance Scholarships [E0172]
Established by friends, faculty, staff, alumni and students of the University to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Emphasis during selection will be given to academic achievement in high school science and mathematics. Application is not required.

Donor(s): Earl B. MacNaughton
Qualification(s): Students with high academic standing, entering an honours program in the College of Engineering and Physical Sciences.
Amount: 4 awards of $2,000

Ed Carter/University of Guelph Faculty Association Scholarship [E0292]
Award is payable at $750 per annum in the student’s 1st, 3rd, and 5th semester levels, provided a cumulative average of at least a 70% is maintained. To receive the final payment, the recipient would normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.

Donor(s): University of Guelph Faculty Association
Qualification(s): Students entering any undergraduate degree program at the University of Guelph from Wellington county.
Amount: 1 award of $2,250 ($750 in the 1st, 3rd, and 5th semesters)

GFTC Legacy Fund Experience Scholarships [E0918]
In recognition of the Guelph Food Technology Centre’s (GFTC) long association with University of Guelph the GFTC Board has created these scholarships. These scholarships recognize academic excellence and encourage students to study and pursue careers in the food sector. Selection is based on academic achievement, quality of past work experience and relevant future career goals. This scholarship is not tenable with the GFTC Legacy Fund Undergraduate Entrance Scholarships. Applications will be completed on the GFTC Legacy Fund Student Application Form (awards@uoguelph.ca) by submitting a one page letter outlining past work experience and a one page letter outlining commitment to future career goals in the food sector. In order to maintain eligibility, recipients must remain registered in one of the specified programs.

Donor(s): The Guelph Food Technology Centre (GFTC)
Amount: 4 awards of $11,500 (payable over 4 years of study)

GFTC Legacy Fund UG Entrance Scholarship [E0899]
In recognition of the Guelph Food Technology Centre’s (GFTC) long association with University of Guelph the GFTC Board has created the GFTC Legacy Fund Undergraduate Entrance Scholarships. These scholarships recognize academic excellence and encourage students to study and pursue careers in the food sector. Selection is based on highest admission average. No application required. Not tenable with the Board of Governors’ Scholarship, Chancellor’s Scholarship, Devine Family Scholarship, Lincoln Alexander Chancellor’s Scholarship and President’s Scholarships. If there are insufficient eligible candidates in any of the academic programs noted above, in any given academic year, the scholarship(s) will be redistributed to eligible candidates from any other of the identified academic programs. Preference will be given to eligible candidates in the B.Sc. Food Science program. In order to maintain eligibility, students must remain registered in one of the specified programs.

Donor(s): The Guelph Food Technology Centre (GFTC)
Amount: 17 awards of $14,000 (payable over 4 years of study)

Gordon W. Innes Scholarship [E0140]
Application is not required.

Donor(s): Gordon W. ‘Sparky’ Innes Scholarship Fund Committee of the Woodstock Agricultural Society.
Qualification(s): Student entering any degree program from Oxford County with the highest admission average.
Amount: 1 award of $1,000

Hardy International Student Scholarship [E0659]
Selection is based on the assessment of the student’s admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.

Donor(s): Mrs. Marion Hardy
Qualification(s): Full-time international students (defined as paying the international student tuition and fees) entering any degree program.
Amount: 1 award of $2,000

International Student Entrance Scholarships [E0408]
In support of the University’s strategic direction of internationalism, entrance scholarships are available each Fall semester to the top international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all relevant documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.

Donor(s): University of Guelph
Qualification(s): Student on a “student visa” entering an undergraduate degree program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.
Amount: Several awards ranging in value from $5,500 - $8,500

J.D. MacLachlan Scholarship [E0170]
Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.

Donor(s): The J.D. MacLachlan Trust
Qualification(s): Students entering any degree program at the University of Guelph.
Amount: 1 award of $1,500

Jack and Lillian MacDonald Scholarship [E0359]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnic Institute) who has the highest cumulative average at the University.

Donor(s): Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald
Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).
Amount: 1 award of $900
James MacMillan Memorial Scholarship [E0494]
Established in memory of James MacMillan, his great uncle, by Austin Conway of Toronto. Selection will be based on highest cumulative average. Application is not required.

**Donor(s):** Austin Conway

**Qualification(s):** Students entering any program offered by OAC who graduated from an Associate Diploma program from the University of Guelph. Preference will be given to students from Eastern Ontario which includes the counties of Prescott and Russell, Stormont, Dundas and Glengarry, Lanark, Renfrew, Leeds and Grenville, Frontenac and Lennox and Addington; and the City of Ottawa and to students entering the Bachelor of Science in Agriculture or the Bachelor of Commerce in Food and Agricultural Business, or the Bachelor of Arts with a major in Food, Agricultural and Resource Economics (FARE).

**Amount:** 1 award of $2,500

Kitty Newman Memorial Scholarship [E0655]
Provided by the Estate of Professor Jay Newman, Ph.D., F.R.S.C. for the purpose of recognizing and encouraging promising scholars in the humanities. These scholarships will be awarded to students with the highest admission averages and preference will be given to those students with a declared major in philosophy. Application is not required.

**Donor(s):** The Estate of the late Professor Jay Newman

**Qualification(s):** Students entering the B.A. program in the College of Arts with a minimum 80.0% admission average.

**Amount:** 3 awards of $1,200

Lincoln Alexander Chancellor’s Scholarships [E0689]
Established in 2001 in honour of Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This award cannot be held with the President’s Scholarships, the Chancellors’ Scholarships or the Board of Governors’ Scholarships.

**Donor(s):** Many Donors

**Qualification(s):** Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.

**Amount:** 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

Mathematical Science Scholarship [E0131]
This scholarship is awarded to the student with the highest admission average. Application is not required.

**Donor(s):** The Department of Mathematics and Statistics

**Qualification(s):** Students entering a program with a major offered by the Department of Mathematics and Statistics.

**Amount:** 1 award of $1,000

McArthur-Humphries Scholarship [E0183]
An equal number of awards are available to students from each county. In the case of insufficient eligible applicants from one county, the awards will be given to eligible applicants from the other county. These scholarships are awarded to students with the highest admission averages. Application is not required.

**Donor(s):** Wilhelmina McArthur-Humphries Trust Fund

**Qualification(s):** Students entering any degree program with a minimum 75% admission average from Lanark and Wellington Counties.

**Amount:** 8 awards of $1,000

OAC 1968 Scholarship [E1008]
The University of Guelph has named one of these twelve prestigious entrance awards in honour of Burton C. Matthews to recognize his financial contributions and volunteer support to the President's Entrance Scholarship program.

**Donor(s):** The Class of OAC 1968

**Qualification(s):** Students entering any OAC undergraduate program with a minimum 75% admission average who are/were registered in the Specialist High Skills Major (SHSM).

**Amount:** 3 awards of $1,000
IX. Scholarships and Other Awards, Bachelor of Arts

Project Hero Scholarship [E0979]
The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

Donor(s): University of Guelph
Qualification(s): Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.
Amount: Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

Quinn Memorial Scholarship [E0578]
Established in memory of Ronald J. Quinn (O.A.C. ‘35) to an entering O.A.C. international full-time or exchange student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application is not required.

Donor(s): Mrs. Helen Quinn (O.A.C. ’35)
Qualification(s): Entering semester one of an O.A.C. program to an international full-time student or to an international exchange student with a preference to those students from developing nations.
Amount: 1 award of $2,000

Ted Morwick Scholarship [E0796]
Established by Ted Morwick, honorary alumni. The student with the highest admission average will be selected. This award is conditional on maintaining a 80% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify. (i.e. The student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year.) If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with any Entrance Awards or in the case of First Responders, through the supporting documentation submitted.

Donor(s): Mr. Edward (Ted) Morwick
Qualification(s): Students entering any degree program in the College of Arts.
Amount: 1 award of $8,000 (payable over four years.)

University of Guelph Entrance Scholarships [E0291]
The value of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student’s financial account in two equal payments in the fall and winter semesters. Application is not required.

Donor(s): University of Guelph
Qualification(s): Students entering their first year of post-secondary studies for the first time with a minimum 85.0% admission average.
Amount: Several awards of $2,000, Several awards of $3,000

W. Penri Morris Memorial Scholarship [E0430]
Established by the family in memory of Penri Morris, who was killed World War II action in 1944 at the age of 21. Penri grew up on the family fruit farm near Forest, Ontario. After graduating from high school, he joined the Royal Canadian Air Force and was attached to the Royal Air Force Bomber Command as a navigator at the time of this death. Awarded to the student with the highest cumulative academic performance above 75% in all courses of the last year in high school study (full-time or equivalent study). Application is not required.

Donor(s): Prof. Rosalina Morris
Qualification(s): Students entering first year of any undergraduate program from North Lambton Secondary School in Forest, Ontario, in their absence, from Lambton County, and their absence, from Ontario.
Amount: 1 award of $1,000

Walter and Halina Slabikowski Scholarship [E0766]
This scholarship was established in memory of Walter and Halina Slabikowski who sent their first generation Canadian born children to university to enrich their lives and provide them with greater opportunities. The award will be given to the student with the highest admission average. The residence deposit must be received by published deadline date. Submit by email to awards@uoguelph.ca your full name, student ID number and a statement attesting to your parents’ place of birth and non participation in post secondary education by April 15th.

Donor(s): Irene Thompson and Slabikowski Family
Qualification(s): Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary studies.
Amount: 1 award of $1,000

Waterloo-Wellington Science & Engineering Fair (WWSEF) Scholarship [E0619]
Established to recognize excellence of the project submissions and encourage students to pursue university studies at the University of Guelph.

Donor(s): University of Guelph
Qualification(s): Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.
Amount: various awards of $1,000

Entrance Scholarships with Financial Need

Bill Klopp Memorial Scholarship [E0150]
Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by April 15. Students should complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

Donor(s): Ross and Mary Lou Klopp
Qualification(s): Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.
Amount: 1 award of $500
Devine Family Scholarships [E4542]
Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of Governors member, with the assistance of the Ontario government's OSOTF program. These scholarships will be given out once every four years, unless the incumbent fails to qualify. The scholarship is renewed in years two, three and four with continued demonstrated financial need and full-time registration; students are required to register for no less than 2 credits each semester. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the “Devine Family Scholarship Application”. Deadline to submit the complete application (both, the E.N.A.F and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Chancellors' Scholarships, but can be held with all other entrance awards. ACCESS AWARD.

Donor(s): Mr. Peter J. Devine with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students who are Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person entering any University of Guelph undergraduate degree program with a minimum 80% admission average. Preference will be given to students who are Black Canadians. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: up to 2 awards of $50,000 each (payable over 4 years of study)

Interhall Council Entrance Scholarship [E0636]
Established by the Interhall Council, the residence student government that programs, advocates and represents residence students to administration and Student Housing Services (www.interhall.ca), to ensure that the residence experience remains accessible to students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15.

Donor(s): Interhall Council

Qualification(s): Students entering a full-time undergraduate degree program with a minimum 85.0% admission average, residing in residence during first year on the Guelph campus with demonstrated financial need and demonstrated strong leadership ability.

Amount: 5 awards of $1,000

Kenneth O. Hammill-Blount Canada Scholarship [E4356]
Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government's OSOTF program. Selection will be based on greatest financial need from the President’s, Lincoln Alexander Chancellor's or Chancellors' Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. ACCESS AWARD.

Donor(s): The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Entering students who have applied for the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $9,600 (payable in 8 payments of $1,200)

L. Norman Gibbins Microbiology Scholarship [E4392]
Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government's OTSS program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): Family, friends and colleagues of Norman Gibbins with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering the Microbiology major in the B.Sc. program with a minimum 80% admission average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $2,500

OAC 1966 Entrance Scholarship [E0903]
In recognition of the contribution made to our lives by the Ontario Agricultural College, the graduates of 1966 O.A.C have established this scholarship to assist a well-qualified student to come to Guelph and become an “Aggie”. Students must complete the online Entrance Financial Need Assessment form as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted) or by April 15.

Donor(s): Class of OAC 1966

Qualification(s): Students entering any degree program offered by O.A.C with demonstrated financial need and are Ontario residents.

Amount: 2 awards of $5,000

P.A.J. Clarke Family Scholarship [E0381]
Paul and Aileen Clarke and their family established the endowment for this entrance scholarship in honour of Paul’s father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining extracurricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not a requirement. This award is not tenable with the President's Scholarships or Lincoln Alexander Chancellor’s Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

Donor(s): Paul and Aileen Clarke

Qualification(s): Students with a minimum 80% average with a record of leadership and community participation. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm.

Amount: 1 award of $12,000 (payable over 4 years)

Robert C. Skipper Scholarship [E0485]
Established by Robert C. Skipper, Diploma in Agriculture 1948 and B.S.A. 1951. Selection will be based on academic standing, participation in extra-curricular activities and involvement in primary production and/or rural community activities. Financial need may also be considered. Apply to Student Financial Services (awards@uoguelph.ca) by April 15 with a one-page summary outlining activities and by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).

Donor(s): Mr. Robert C. Skipper

Qualification(s): Students entering a degree program in O.A.C that have graduated with a Diploma in Agriculture or Horticulture from the University of Guelph's Ridgetown campus.

Amount: 1 award of $750

Rol-Land Farms Scholarships [E4519]
Established by Rol-Land Farms, with the assistance of the Ontario government’s OSOTF program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): Rol-Land Farms with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students entering a degree program with demonstrated financial need and a minimum 80% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 13 awards of $2,000
Spitzig Entrance Scholarship in Economics [E4543]
A graduate (1986) of the B.A. Economics program has established these scholarships with the assistance of the Ontario government's OTSS program. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student). Deadline to submit the application is April 15. Selection will be based on the highest admission averages. ACCESS AWARD

Donor(s): Anonymous with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students entering a Bachelor of Arts program offered by the Department of Economics. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 2 awards of $4,500

Entrance Bursaries

Charlebois-Vézé Family Bursary in Economics [E3073]
Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F) to Student Financial Services by April 15.

Donor(s): Charlebois-Vézé Family
Qualification(s): Students entering any program offered by the Department of Economics and Finance, Gordon S. Lang School of Business and Economics with demonstrated financial need.
Amount: 1 award of $1,000

Costco Wholesale Bursary [E3579]
This award was created to assist first-year students in obtaining a post-secondary education in business-related studies. Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F) to Student Financial Services by April 15. Preference given to a student whose permanent address is in Guelph. ACCESS AWARD

Donor(s): Costco Wholesale with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students entering any program offered by the Gordon S. Lang School of Business and Economics with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 1 award of $2,000

Dorothy Wright Entrance Bursary [E3075]
Established in memory of Miss Dorothy Wright, sister, and Miss Dorothy Wright, aunt, of Mr. Ivor Wright, OAC 65A this bursary supports students entering any undergraduate degree program offered by the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F) to Student Financial Services by April 15.

Donor(s): Mr. R. Ivor Wright
Qualification(s): Students entering any OAC degree program who have demonstrated financial need.
Amount: 1 award of $1,000

Elizabeth Maud Hunter (Shier) Bursary [E3575]
This award was created to assist first year students in obtaining a post secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing a similar situation. Preference given to a student from the County of Brock. Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F) for Entrance Awards. ACCESS AWARD

Donor(s): The Estate of the Late William Henry "Harry" Hunter with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students entering any degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 3 awards of up to $4,500

First Year Student Residence Bursary [E3066]
These 5 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the on-line Financial Need Assessment Form for Entrance Awards by April 15.

Donor(s): Student Housing Services
Qualification(s): Students entering any degree program with demonstrated financial need.
Amount: 5 awards of $500

Fred Hindle Bursary [E3500]
Awarded in memory of Fred Hindle, O.A.C.'38, a long-time generous supporter of his Alma Mater, who at the time of his death, wanted future students to have the same opportunity for an education as he had received. This bursary is awarded with the assistance of the Ontario government's OSOTF program. This bursary is dependent on continued demonstration of financial need and successful completion of study to advance into the next year. Students should complete the online Financial Need Assessment Form (N.A.F) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.ACCESS AWARD

Donor(s): W. Roy Hindle and family with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Entering O.A.C. degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statement on Awards).
Amount: 1 award of $6,000 (payable over 4 years)

Harvey Graham Bursary [E3030]
Provided by Harvey Graham (O.A.C. ’39). Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a working farm and who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.

Donor(s): Harvey Graham, O.A.C. ’39
Qualification(s): Students entering any degree program who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.
Amount: 1 award of $1,500

International Student Entrance Bursaries [E3043]
In support of the University's strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students entering an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar's Entrance Award Application to Student Financial Services.

Donor(s): University of Guelph
Qualification(s): Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.
Amount: Several awards ranging in value from $1,000 to $3,000

John A. Carther Bursary [E3086]
The late John A. Carther of Cornwall Ontario has created the John A. Carther Bursary to support students from Eastern Ontario. Preference will be given to students from the counties of Stormont, Dundas and Glengarry. Apply to Student Financial Services by April 15th by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F).

Donor(s): The estate of John A. Carther
Qualification(s): Students entering any program offered by the Ontario Agricultural College with demonstrated financial need.
Amount: 1 award of $2,000
McCracken Family Bursaries [E3580]
Ron and Doreen McCracken from Scotland Ontario have created these bursaries in memory of his mother and father who farmed near Cobourg Ontario. These bursaries will provide opportunities for students to study agriculture and food at the OAC. Preference will be given to students who have graduated from high school with a Specialist High Skills Majors Program (SHSM). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. ACCESS AWARD.

**Donor(s):** Ron and Doreen McCracken with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Students entering any undergraduate degree program offered by OAC with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 5 awards of $3,000

Registrar's Entrance Bursaries [E3084]
Established by the University of Guelph to support entering undergraduate students with identified financial need. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Bursary, but can be held with all other entrance awards.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering any degree program with a minimum registration of 1.5 credits and demonstrated financial need.

**Amount:** 500 awards of $4,000

Robert Arthur Stewart Bursaries [E3272]
Established in memory of Mrs. Elsa H. Stewart of Pakenham, Ontario. Mr. Stewart graduated from the Ontario Agricultural College in 1933 and Mrs. Stewart from Macdonald Institute in 1932. Applicants for these bursaries should have a good academic record and an active interest in community affairs. A letter from the student and a recommendation from the County agricultural representative or the secondary school principal should be sent to Student Financial Services by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

**Donor(s):** The Estate of Mrs. H. Stewart

**Qualification(s):** Students from the Ontario Counties of Lanark and Renfrew, and the Regional Municipality of Ottawa-Carleton, entering the 1st semester of a degree program at the University of Guelph.

**Amount:** 14 awards of $1,000

Steven Jones Memorial Bursaries [E3077]
Established by Mr. and Mrs. Jones in memory of their late son, Steven Jones (B.Comm. 97). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. Selection will be made on demonstrated financial need.

**Donor(s):** Mr. Harry Jones

**Qualification(s):** Students entering any degree program with demonstrated financial need.

**Amount:** several awards of $2,000

University of Guelph Accessibility Bursaries [E3038]
Established by the University of Guelph to support students with substantial demonstrated financial need. In addition, students will be automatically approved for to participate in the work-study program conditional on the student securing a work-study approved position on campus. Participating in the work-study program is not required to hold this bursary. Payments of this award and the eligibility to participate in the work-study program are conditional upon the recipient receiving funding through their provincial/territorial and/or federal student loan assistance program and registration in a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Bursary, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering any undergraduate degree program offered by OAC with demonstrated financial need and a minimum registration of 1.5 credits.

**Amount:** 200 awards of $14,000 (payable over 4 years) plus Work-study approval

Veriphy Skincare Scholarship for Women in STEM [E1092]
Supporting women and the pursuit of education in STEM are intrinsic values for the Veriphy founders. To support this commitment this scholarship has been established through the University of Guelph, where PhytoSpherix™ was discovered. Apply by completing the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. Selection will be based on greatest financial need.

**Donor(s):** Veriphy Skincare Inc.

**Qualification(s):** Female students entering a program offered by the College of Engineering and Physical Sciences with a minimum 80.0% admission average and demonstrated financial need.

**Amount:** 1 award of $1,000

In-course Scholarships

A.M. Ross Centennial Scholarship [10249]
Offered by Professor A.M. Ross (funded in part on royalties derived from the O.A.C. Centennial Alumni publication of The College on the Hill). Application is not required.

**Donor(s):** Professor A.M. Ross

**Qualification(s):** Students in the 7th semester of the honours English program who have the highest standing in ten or more English courses taken during the first 6 semesters at the University of Guelph. An 80% average in these courses is required.

**Amount:** 1 award of $1,000

Aboriginal Student Engagement Scholarship [10922]
Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA's commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status), Métis or Inuit and outline volunteer/leadership experience within the Aboriginal community. The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but not be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

**Donor(s):** Aboriginal Student Association

**Qualification(s):** Students registered in any program who self-identify as First Nation (status and non-status), Métis or Inuit, who are engaged in the Aboriginal community either in their home community or at the University of Guelph.

**Amount:** 1 award of $1,000

Agnes Varis Scholarship in Women's Studies [10596]
Established by Dr. Agnes Varis, founder and president of Agar Chemicals. The award is provided to the student who demonstrates a passion and commitment for advancing education for women as evidenced by a major (or double major) in Women's Studies. Preference will be given to those students whose application letter or C.V. demonstrates an understanding that women who benefit from advanced education must help other women advance in society, through community, mentorship and teaching roles. Apply by letter and/or curriculum vitae to the Director of Women's Studies by May 15.

**Donor(s):** Dr. Agnes Varis

**Qualification(s):** Students majoring (or double majoring) in Women's Studies with a minimum cumulative average of 80% in Women's Studies courses and who have completed a minimum of 15.0 credits.

**Amount:** 1 award of $1,000

Aino Menning Memorial Scholarship [10176]
Established in memory of Aino Menning. Application is not required.

**Donor(s):** Mrs. Tui Menning-Torrie

**Qualification(s):** Student majoring in Music who has completed 1.0 credits in Applied Music and has demonstrated special ability in piano performance and high academic standing. All else being equal, preference will be given to a female student, in order to encourage women in the field.

**Amount:** 1 award of $500
Alumni House Call Centre Scholarship [I1020]

Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15th with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

Donor(s): Former Employees of the Alumni House Call Centre
Qualification(s): Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.

Amount: 1 award of $1,000

Alun Joseph Tribute Scholarship [I0756]

Selection will be based on significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities in the following academic year. Apply to the CSAHS Awards Committee by May 15 with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

Donor(s): Dr. Alun Joseph Dean of the College of Social and Applied Human Sciences from 2000-2010 & Mrs. Gillian Joseph (CSS BA '94, FACSS MSc '96) along with contributing donors to the Alun Joseph Tribute Fund
Qualification(s): Full-time students registered in any program offered by the College of Social and Applied Human Sciences with a minimum 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the following academic year.

Amount: 1 award of $2,000

Amina Kapadia Memorial Scholarship [I1093]

This scholarship was created and funded by the Kapadia Family and Department of Chemistry, in the memory of Ms. Amina Kapadia who died with her parents in a tragic house fire on February 14, 2017.

Donor(s): The Kapadia Family
Qualification(s): Student registered in the Biological and Pharmaceutical Chemistry major who completed CHEM*1400 in the previous academic year (fall/winter/summer).

Amount: 1 award of $1,000

Andrea Laatsch Scholarship [I1018]

Application is not required.

Donor(s): The friends of Andrea Laatsch
Qualification(s): Student who has high academic standing in the 2nd year of the German Studies program during the preceding calendar year and has made significant contributions to the University community.

Amount: 1 award of $300

Anna Graham Technical Theatre Studies Scholarship [I0683]

Established in memory of Anna Graham to recognize passionate student involvement in technical dramatic production. Selection will be based on high academic achievement and involvement and interest in technical theatre studies as demonstrated through course work, theatre practice, and summer related work experience. Apply by May 15th to the College of Arts Awards Committee with a letter outlining the technical theatre course(s) completed and/or involvement in technical theatre studies and summer related work experience or information about your involvement in theatre activities.

Donor(s): Jon Halliwell
Qualification(s): Students registered in the Theatre Studies major who have completed a minimum of 10.0 credits with a minimum 70% cumulative average.

Amount: 1 award of $1,000

Arvind Ravi Memorial Scholarship for Excellence in Mathematics [I1125]

Established in memory of Arvind Ravi to promote Excellence in Mathematics. Selection will be the highest cumulative average. Not tenable with the other 4th year awards. Award can only be held once. Application is not required.

Donor(s): Ravi & Ravi Venkataraman
Qualification(s): Students registered in any major offered by the Department of Mathematics and Statistics who have completed between 14.0 and 19.5 credits, with at least 5.0 MATH credits, and at least 1.5 credits at the 3000 level or above-including MATH*3200.

Amount: 1 award of $3,000

Austrian Embassy Prize [I0022]

Provided by the Austrian Embassy. May be awarded in addition to Swiss or German Consulate Prizes. Application is not required.

Donor(s): The Austrian Embassy
Qualification(s): Advanced students of German who have shown excellence in the past two semesters, but need not be graduating.

Amount: 2 Book prizes

Bill Taylor Memorial Scholarship [I0280]

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.

Donor(s): AMF Canada Ltd.
Qualification(s): Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or intercollegiate athletics.

Amount: 1 award of $900

Blackburn Scholarship [I0404]

In commemoration of the 125th Anniversary of the Ontario Agricultural College, Dr. D.J. Blackburn, a retired faculty member of the former Rural Extension Studies program and former Director of the Associate Diploma Program has established this scholarship. Apply by letter, citing athletic contributions, to the O.A.C. Awards Committee (award@uoguelph.ca) by May 15. Please include our name, student ID number and the name of the award on your application.

Donor(s): D.J. Blackburn
Qualification(s): O.A.C. degree or diploma student who has participated in intercollegiate athletics and maintained a minimum cumulative average of 70% while registered at Guelph. Athletic excellence and leadership will be used to determine the recipient. Students who have completed up to 3 years of study are eligible.

Amount: 1 award of $1,000

Braithwaite Business Scholarships [I0827]

Named in honour of Professor Bill Braithwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15 with a resume and 500-word statement describing why business courses, in addition to their major, will benefit their future career. Shortlisted applicants may be invited for an interview with the LANG Awards Committee. Selection is based on the student who best describes why taking business courses, in addition to their major, will benefit their future career. Students may hold this award only once.

Donor(s): Anonymous
Qualification(s): Students registered in any degree program, with the exception of B.Com., who have successfully completed 1.0 credits towards the Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150 Introduction to Canadian Business or students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) who have completed 1.0 credits towards the minor.

Amount: 10 5000 (payable over 2 semesters)

Bridge Builder Scholarship [I1050]

The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Apply to Student Financial Services by May 15 with a one page letter outlining the volunteer activities that lead to social connections, breaking down barriers, and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people through one or more of the following: Civic engagement by facilitating community engagement, social integration and volunteerism to promote inclusion for immigrant and ethno-cultural communities; Social connections by promoting social connections and employment networking, including programs that reduce barriers and increase support for vulnerable groups; Education and empowerment by promoting intercultural understanding and break down barriers to participation in community life and decision-making. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.

Donor(s): Muslim Society of Guelph
Qualification(s): Students registered in any program who, through volunteer activities in the local community, have demonstrated a passion and commitment for building bridges in one or more of the following ways: facilitating social connections; breaking down barriers; and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people.

Amount: 1 award of $1,000
### Byron Sheldrick Scholarship in Law and Politics [I1066]
This scholarship was established by Byron Sheldrick, former chair of the Department of Political Science, to recognize the department’s contribution to the study of Law and Politics. The student with the highest grade in any one of: POLS 3130; POLS 3140; or POLS 3300 will be selected. In the event of a tie, the student with the highest cumulative academic program average will be selected. Application is not required.

**Donor(s):** Byron Sheldrick  
**Qualification(s):** Students registered in the Criminal Justice & Public Policy (CIPP) major or the Political Science (POLS) major who have completed at least one of: POLS*3130; POLS*3140; or POLS*3300 in the previous academic year (F/W/S sequence).

**Amount:** 1 award of $1,500

### C.A.S.U. (College of Arts Student Union) Book Prize [I0155]
Students may win the prize once only in each department or school. Apply to the Chair of the Department or the Director of the School by April 30.

**Donor(s):** C.A.S.U.  
**Qualification(s):** Students who have graduated or are graduating in the previous Fall or Winter semesters from any degree program and who are participating in curriculum-embedded experiential learning in the following academic year.

**Amount:** 8 Book prizes

### Carolyn Oke Langill Community Outreach Scholarship [I1043]
Students should apply by May 15 with a 500 word letter describing previous volunteer work in the first two years of university and their interest in children and families. Selection will be based on the student’s commitment to community engagement and volunteerism as demonstrated by a 500 word letter describing previous volunteer work in the first two years of university and an interest in children and families. Applicants may be involved in a project at a local, national or international level and must provide a budget for the intended work or travel. Travel must be curriculum approved.

**Donor(s):** Carolyn Oke Langill, FACs alumna of 1980  
**Qualification(s):** Students registered in any program offered by the College of Social and Applied Human Sciences who have completed between 10.0 and 15.0 credits and who are participating in curriculum-embedded experiential learning in the following academic year.

**Amount:** 1 award of $1,000

### CEPS-SC Student Leader Scholarship [I0938]
Established to recognize the student who demonstrates the most significant contributions to enhancing and promoting the physical and engineering sciences at the University of Guelph, through volunteer leadership roles. Apply to the CEPS Awards Committee (cepsada@uoguelph.ca) by May 15 with a one page letter outlining volunteer/leadership contributions and a reference letter indicating what contributions they made to promoting and enhancing physical and engineering sciences.

**Donor(s):** College of Engineering and Physical Sciences Student Council  
**Qualification(s):** Students registered in any program offered by the College of Engineering and Physical Sciences who have completed a minimum of 4.0 credits with demonstrated involvement in college-related volunteer/leadership activities.

**Amount:** 2 awards of $1,000

### CFRU Volunteer Scholarship [I0215]
The award is presented to the student who has made the most significant contribution to the operation and goals of CFRU. Apply to Student Financial Services by May 15 with a letter describing the contributions made as a volunteer with CFRU and how these contributions have supported the operation and furthered the goals of CFRU.

**Donor(s):** CFRU Alumni  
**Qualification(s):** Students registered in any program with a minimum cumulative average of 70% who have volunteered at CFRU for at least one year.

**Amount:** 1 award of $1,000

### Charles McGowan Memorial Prize [C0187]
The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.

**Donor(s):** Family and Friends of Vikki Kenny  
**Qualification(s):** Students registered in any program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.

**Amount:** 1 award of $1,000

### Class of ‘51 O.A.C. Leadership Prizes [C0063]
Established in memory of the late Lieutenant Charles McGowan. Application is not required.

**Donor(s):** Charles McGowan Memorial Fund  
**Qualification(s):** Outstanding graduating student in an O.A.C. degree program.

**Amount:** 1 award of $200

### Christina Victoria Kenny Memorial Scholarship [I1018]
The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.

**Donor(s):** Family and Friends of Vikki Kenny  
**Qualification(s):** Students registered in any program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.

**Amount:** 1 award of $1,000

### Class of ’51 O.A.C. Leadership Prizes [C0063]
Established by Year ‘51 O.A.C., on the occasion of its 45th anniversary. Selection will be based on significant demonstrated leadership in College and/or University extracurricular activities. Apply to the OAC Awards Office (oacaward@uoguelph.ca) by April 1 with a letter outlining your demonstrated leadership in College and/or University extracurricular activities. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** Year ‘51 O.A.C.  
**Qualification(s):** Students who have graduated or are graduating in the previous Fall or Winter semesters from any degree or associate diploma program in the OAC, Guelph campus.

**Amount:** 5 awards of $3,000

### Class of ’67 O.A.C. Centennial Scholarship [I0067]
Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter outlining participation in extracurricular activities in all branches of college life. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** Class of O.A.C. ’67  
**Qualification(s):** Student majoring in an O.A.C. department who through activity in all branches of college life as well as scholastic achievement has made an outstanding contribution to the University.

**Amount:** 2 awards of $2,000

### Class of 1970 Scholarship [I0424]
Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.

**Donor(s):** Class of 1970: 25th Reunion Gift  
**Qualification(s):** Outstanding student in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Deans' Honours List.

**Amount:** 1 award of $1,400
### Class of Mac 1964 Scholarship [I1033]

Apply to the CSAHS Awards Committee by May 15th with a one page letter outlining your experiential learning opportunity and the impact the experience had on your academic studies. Selection will be based on the student who best describes how their experiential learning positively impacted their academic studies. Preference will be given to students who best explain how their experiential learning has directly benefited their area of study within CSAHS; highest cumulative average will be used in the case of a tie.

**Donor(s):** The Class of Mac 1964  
**Qualification(s):** Students registered in the College of Social and Applied Human Sciences with a minimum cumulative average of 75% and a minimum of 10.0 credits who have participated in experiential learning including curriculum-embedded experiential learning, placements, field courses and international travel opportunities within the last 3 semesters.

| Amount: | 1 award of $1,500 |

### Clayton and Dorothy Switzer Scholarships [I0276]

Apply by May 15th to the OAC Awards Office (oaacaward@uoguelph.ca) with a letter outlining how you have demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** Clayton and Dorothy Switzer  
**Qualification(s):** Students registered in a degree program offered by O.A.C. with a minimum of 10.0 credits completed, at least a 70% cumulative average and has demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal.

| Amount: | 1 award of $2,500 |

### College of Arts Medal [C0383]

The College of Arts Medal is awarded in June to the student graduating from the College of Arts in the Spring or two previous convocations with the highest cumulative average. Application is not required.

**Donor(s):** Office of the Dean of Arts  
**Qualification(s):** Awarded to the graduating student with the highest cumulative average.

| Amount: | 1 award of a Medal |

### College of Engineering and Physical Sciences Graduation Prize [C0075]

The winner will be selected in May from all students who have completed the program in the previous twelve months. Application is not required. One award of $1000 and a commemorative plaque.

**Donor(s):** College of Engineering and Physical Sciences  
**Qualification(s):** Students who are graduating in June, or who have graduated in the previous Winter or Fall convocations with the highest cumulative average from an honors program offered by the College of Engineering & Physical Sciences.

| Amount: | 1 award of $1,000; 1 Commemorative plaque |

### Collins Barrow Scholarship [I0040]

Offered by Collins Barrow, a national firm of Chartered Professional Accountants. Selection will be based on the student who has achieved the highest grade in the course ACCT+3330, Intermediate Financial Accounting, in the past academic year. In the event of a tie, the award will go to the student with the highest cumulative average. Application is not required.

**Donor(s):** Collins Barrow - Wellington Dufferin District  
**Qualification(s):** Students who have successfully completed the course ACCT+3330, Intermediate Accounting.

| Amount: | 1 award of $1,000 |

### Consul General of Belgium Prize for French House [I0080]

The recipient will be selected by a committee consisting of the French House Program Director, a representative of East Residences, and the Head of French Studies. The award is presented by the Belgian Consul General. Application is not required.

**Donor(s):** Consul General of Belgium in Toronto  
**Qualification(s):** Student resident in French House with good academic standing, who has made the greatest contribution to the program of the residence and to the knowledge of Francophone cultures.

| Amount: | 1 Book Prize |

### Crowley/Jackman Gold Prize in History [C0835]

The award will go to the student with the highest cumulative average. The medal has been endowed by Terry Crowley, former chair of the Department of History, and his partner Terry Jackman, a Guelph lawyer.

**Donor(s):** Dr. Terence Crowley  
**Qualification(s):** Students who are graduating in June, or who have graduated at the previous fall or winter convocation, from the BA degree program with a major in History.

| Amount: | 1 award of $1,000 |

### CSAHS Alumni Association CJPP Scholarship [I0974]

This award is for students who are considering careers in the criminal justice field and have demonstrated commitment to public/community service through volunteer involvement. Preference will be given to students who have volunteered in areas related to the criminal justice field. In the event of a tie, the award will be given to the student with the highest cumulative average. Apply to the CSAHS Awards Committee by May 15 with an application letter outlining your volunteer experiences in public/community service with specific reference to volunteer activities related to the criminal justice field (maximum 500 words).

**Donor(s):** CSAHS Alumni Association  
**Qualification(s):** Students enrolled in a specialization of the Criminal Justice and Public Policy (CJPP) program with a minimum of 8.0 credits and a maximum of 17.0 credits.

| Amount: | 1 award of $1,000 |

### CSAHS SA Student Leader Scholarship [I0864]

Selection will be based on contributions to college-related activities. Apply to the CSAHS Awards Committee by May 15 with a one page letter outlining volunteer experience within the college.

**Donor(s):** CSAHS Student Alliance  
**Qualification(s):** Full-time students registered in any program offered by the College of Social and Applied Human Sciences who have completed a minimum of 8.0 credits and can demonstrate involvement in college-related volunteer activities.

| Amount: | 1 award of $1,000 |

### CSAHS Student Volunteer Scholarship [I0482]

Inspired by Theresa Firestone, FACS ’78, and funded by the Harshman Fellowships Society and Pfizer Canada Inc. Students may apply on their own or be recommended by other students, faculty members or administrators from non-profit organizations. Apply to the CSAHS Dean's Office with two letters of recommendation, at least one of which should be from an individual who can speak to his/her volunteerism and a summary letter outlining the student's volunteer experience and what has been gained or learned from this experience that has enhanced his/her personal growth and/or career goals by May 15.

**Donor(s):** Harshman Fellowship Society and Pfizer Canada Inc.  
**Qualification(s):** Full-time undergraduate students in any degree program offered by the College of Social and Applied Human Sciences and have completed at least 15 course credits with a minimum cumulative 70% average.

| Amount: | 1 award of $500 plus an equal amount to the charitable organization of the recipient's choice |

### CSS Alumni Heritage Scholarship [I0616]

Established to recognize the valuable contributions made by CSS alumni and Alumni Association to the life and vitality of the University. These scholarships will be awarded to the student with the highest cumulative program average. This scholarship may be held only once. Application is not required.

**Donor(s):** CSS Alumni Heritage and the Dean of CSAHS  
**Qualification(s):** Students registered in any Economics major or the Marketing Management major, who have completed between 7.5 and 12.5 credits, and are registered in the same majors for the subsequent fall semester with a minimum cumulative average of 80.0%.  

| Amount: | 2 awards of $1,000 |

### D.C. Masters Prize in History [C0180]

Provided by the Department of History in the College of Arts to a student selected annually in the Spring semester from students who have completed their degrees in the previous twelve months. Application is not required.

**Donor(s):** Department of History  
**Qualification(s):** Student completing the honours program in History (specialized honours, combined honours, or major honours) with the highest cumulative average (minimum of 80%) in History courses at the 3000 and 4000 levels in the preceding academic year.

| Amount: | 1 award of $500 |
### Dairy Challenge Prize [I0811]
Supported by The Madsen Dairy Cattle Research Fund, the Dairy Challenge Prize will be awarded to students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge. No application is required.

**Donor(s):** Madsen Dairy Cattle Research Fund  
**Qualification(s):** Students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge.  
**Amount:** several awards up to $2000

### Dan Mathieson Scholarship [I1124]
This award recognizes students registered in the Political Science (POLS) major who have completed a minimum of 10.0 credits with demonstrated extracurricular activity and community involvement. Selection will be based on most significant contribution to community as evidenced through extracurricular and/or volunteer activities. Students apply to the Political Science Awards Committee by May 15th with a one-page letter outlining their community related extracurricular volunteer activities. Not tenable with the Class of 1983 Political Science Scholarship I1129 or the Steven Harrington Memorial Scholarship I1122.

**Donor(s):** Dan Mathieson  
**Qualification(s):** Students registered in the Political Science (POLS) major who have completed a minimum of 10.0 credits with demonstrated extracurricular activity and community involvement.  
**Amount:** 1 award of $1,000

### David F. Boyes Apiiculture Scholarship [I0031]
Established in memory of David Boyes in a technician in the Apiiculture Field Laboratory. Application is not required.

**Donor(s):** The Apiculture Club  
**Qualification(s):** Student registered in the Fall semester who achieves high academic standing in Introductory Apiiculture ( ENVB*2210 ) in the previous year, demonstrates an interest in apiculture and who has participated in extracurricular activities.  
**Amount:** 1 award of $200

### David Murray Medal in Arts [C0071]
The recipient is selected by the Awards Committee of the College of Arts. Application is not required.

**Donor(s):** College of Arts  
**Qualification(s):** College of Arts nominee for the Winegard Medal.  
**Amount:** 1 award of $350, 1 Medal

### Deans' Scholarships [I0323]
This award was established by the Board of Governors’ in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.

**Donor(s):** Board of Governors  
**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.  
**Amount:** 150 awards of $2,000

### Dixon More Mathematical Science Scholarship [I0506]
This scholarship is named in honour of Professor Dixon More, for his long-term and substantial contributions to the Department of Mathematics and Statistics. The recipients will be selected on the basis of a highest cumulative average in a minimum of 4.0 credits from semesters 5 and 6. A student may be considered for this award once only. This award is not tenable with the R.C. Moffatt Memorial Scholarship in Mathematical Science (I0536). Application is not required.

**Donor(s):** Professor C. Dixon More  
**Qualification(s):** Students who have completed a minimum of 14.0 credits, but no more than 19.5 credits and are registered in a major offered by the Department of Mathematics & Statistics.  
**Amount:** 2 awards of $1,000

### Donald I. Broadfoot Scholarship [I0994]
This scholarship was created in honour of Donald Broadfoot who graduated from OAC in 1950. He worked for Hy-Line Poultry (a division of Pioneer Corn Company) in the US and Canada from 1950-1974 where he conducted disease and genetic research, and during that time did a lot of work which led up to effective treatments for various diseases in poultry. Apply by May 15 to the OAC Awards Committee (oacaward@uoguelph.ca) with a letter (no more than 2 pages) outlining your interest in poultry science. Please include relevant work experience; relevant volunteer experience and/or relevant research projects that demonstrate this interest. Please include the name of the award and the award ID number in the subject line of your email as well as on your application. Please include your student number on your application. Selection will be based on the strongest demonstrated interest measured by; work experience; volunteer experience and/or projects. Students may only receive this award once.

**Donor(s):** Doug Broadfoot  
**Qualification(s):** Students registered in any program in OAC who have completed a minimum of 10.0 credits at the time of application and who demonstrate an interest in poultry science.  
**Amount:** 1 award of $500

### Donna Lero Scholarship in Family Services [I0976]
Established by Donna Lero upon her retirement after 42 years as a faculty member in the department of Family Relations and Applied Nutrition. Selection will be based on the most significant impact made in support of families through volunteer activities with agencies or services that support families. Apply by May 15 to the Department of Family Relations and Applied Nutrition with a letter of application outlining the impact made in support of families, including interest in pursuing a career in family services and one letter of reference supporting the impact. Students may only hold this award once.

**Donor(s):** Donna Lero  
**Qualification(s):** Students registered in any major or minor offered by the Department of Family Relations and Applied Nutrition who have an interest in pursuing a career in family services, have completed a minimum of 12.5 credits and who have volunteered with agencies or services that support families.  
**Amount:** 1 award of $1,000

### Douglass M. Robinson Memorial Scholarship for Excellence in Communications [I0499]
Established in memory of Douglas Robinson, OAC’53. Doug spent his career promoting and creating awareness of agriculture. This scholarship recognizes his leadership in agriculture communications and his service to both the University and agriculture communities. Apply with a resume to the OAC Awards Committee (oacaward@uoguelph.ca) by May 15. Selection will be based on demonstrated leadership promoting and creating awareness of agriculture through extracurricular activity including student competitions, university clubs, events and student government.

**Donor(s):** Mrs Marilyn Robinson Murray  
**Qualification(s):** Students registered in any degree program offered by the Ontario Agriculture College with a minimum of 10.0 credits.  
**Amount:** 1 award of $1,000
Dr. James (Jim) Atkinson Scholarship [I1025]
This award has been created through the generous contributions of many alumni and friends to recognize Dr. James (Jim) Atkinson’s influence at Guelph. As coach for over thirty years on both the men’s and women’s teams, as well as a respected faculty in the department of Animal and Poultry Science, Jim has had an impact on and off the field. The recipient will be selected based on extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

**Donor(s):** Alumni and Friends of Dr. James (Jim) Atkinson

**Qualification(s):** One male rugby player and one female rugby player who is registered in an undergraduate program and who has achieved a minimum 70% cumulative average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student enrolled in the Ontario Agricultural College.

**Amount:** 2 awards of $1,000

Dr. R. J. Hilton Memorial Scholarship [I0678]
Established to honour the accomplishments of Dr. Hilton as the Chair, Horticulture Science, University of Guelph, first Director of the Arboretum and President/Chair of the Royal Botanical Gardens. Selection will be based on the highest cumulative average, demonstrated involvement in horticulture activities and involvement in academic club activities. Summer related work experience will also be considered. Preference will be given to students registered in B.Sc.(Agr.) CHATS and B.Sc. Plant Science. Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter outlining the plant agriculture course(s) and/or involvement in horticulture activities and summer related work experience or information about involvement in academic club activities. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** Robert E. Hilton

**Qualification(s):** Students registered in any program offered by O.A.C. who have completed a minimum 8.0 credits with a minimum 70% cumulative average.

**Amount:** 1 award of $1,000

Dr. Ralph and Joanne Watt Scholarship [I1080]
Apply to the OAC Awards Committee (oacaward@uoguelph.ca) by May 15 with a resume and a letter (no more than two page) outlining your career interests and your employment and/or extracurricular activities that demonstrate your interest in becoming an equine veterinarian and your involvement in agricultural activities. Please include the Award Name and ID in the subject line of your email and on all pieces of your application. Please also include your student ID on your application.

**Donor(s):** Sandy Watt

**Qualification(s):** Students registered in the Bachelor of Science in Agriculture with a major in Animal Science, or Honours Agriculture; the Bachelor of Science with a major in Animal Biology; or the Bachelor of Bio-Resource Management with a major in Equine Management who have completed a minimum of 8.0 credits who aspire to become an equine veterinarian are eligible. Selection will be based on highest cumulative average. Preference will be given to students who aspire to becoming an equine veterinarian and who actively participate in agricultural activities.

**Amount:** 1 award of $1,000

E.B. MacNaughton Convocation Prize [C0171]
Established by the College of Engineering and Physical Sciences to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application is not required. Students who have graduated from an honors program offered by the College of Engineering & Physical Sciences in the previous fall or winter semesters or will graduate in the upcoming summer semester in June, or who have graduated in the previous two convocations, with a minimum cumulative average of 80% in the previous two years of study. Apply by letter (no more than two pages), outlining university and off-campus community service activities in Canada and abroad, to the attention of the Director of International Development Studies. Submit applications electronically by March 15th to ids@uoguelph.ca.

**Donor(s):** The College of Engineering and Physical Sciences

**Qualification(s):** The College of Engineering and Physical Sciences nominee for the Winegard Medal.

**Amount:** 1 award of $1,000

Economical Insurance Scholarships [I1069]
Apply to the LANG Awards Committee (lang.awards@uoguelph.ca) by May 15 with a one-page letter outlining the individual’s volunteer involvement or employment in the insurance industry. The scholarship will be awarded to the student with the highest cumulative average.

**Donor(s):** Economical Insurance

**Qualification(s):** Students registered in the Bachelor of Commerce program, or Bachelor of Arts Program with a major in Economics, who have completed a minimum of 10.0 credits and no more than 15.0 credits with experience volunteering or working in the insurance industry.

**Amount:** 2 awards of $1,000
**Faculty Prize in Classics [I0098]**

The prizes are awarded to students selected by members of the Classics Section of the School of Languages and Literatures and by the Director of the School. Application is not required.

**Donor(s):** Dr. P. O’Cleirigh and Dr. A. Sherwood  
**Qualification(s):** Students registered in any Classics program are eligible and the awards are based on aggregate performance in one or more courses totaling 1 credit at the 2000 level or above from Classical Studies, Greek or Latin.

**Amount:** 2 awards of $100

---

**Fidelity Investments Canada Theory of Finance Scholarship [I1095]**

The Fidelity Investments Canada Theory of Finance Scholarship is awarded to female students who completed ECON*2560 “Theory of Finance” in the fall/winter/summer semesters of the previous year. Application is not required.

**Donor(s):** Fidelity Investments Canada ULC  
**Qualification(s):** The top four female students with the highest grades from the fall/winter/summer of the previous academic year. The selected students will receive this scholarship in the following fall semester. In the event of a tie the student with the highest cumulative average will receive the scholarship

**Amount:** 4 awards of $1,000

---

**Frances M. Stretton Scholarship [I0768]**

Selection will be based on significant prior contributions to and experience in community-based service. Preference will be given to students working on a project related to nutrition, food safety or sustainability within the College. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

**Donor(s):** Mrs. Frances M. Stretton  
**Qualification(s):** Students registered full-time in any program offered by the College of Social and Applied Human Sciences with a minimum of 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the following academic year.

**Amount:** 1 award of $5,000

---

**Frederick Vaughan Political Science Scholarship [I0513]**

Established by Bernard Cummins, a ’92 and ’93 graduate of the College of Social Science, along with alumni and the friends and family of Frederick Vaughan, in honour of Professor Frederick Vaughan. The award winner will be selected on the basis of outstanding academic achievement in POLS 3130 (Law, Politics and the Administration of Justice) or POLS 3210 (The Constitution and Canadian Federalism). Application is not required.

**Donor(s):** Mr. Bernard Cummins  
**Qualification(s):** Students in the B.A. program majoring in Political Science or Criminal Justice and Public Policy, who have successfully completed between 12.5 and 15.0 credits, including POLS*2300 (Canadian Government) and one of POLS 3130 (Law, Politics and the Administration of Justice) or POLS*3210 (The Constitution and Canadian Federalism).

**Amount:** 1 award of $1,000

---

**French Consul Prize [I0105]**

Selection by Faculty in French Studies (School of Languages and Literatures).

**Donor(s):** French Consul  
**Qualification(s):** Offered to a student for work in oral French.  
**Amount:** 1 Book prize

---

**Friends of Music Book Prize [I0218]**

Established by the Friends of Music of the University of Guelph. Application is not required.

**Donor(s):** Friends of Music, Chair, Department of Music  
**Qualification(s):** Student who, in a given year, has completed at least 15.0 credits toward the honours B.A. with a major in Music and has the highest cumulative average in Music courses.

**Amount:** 1 (or more) Book prize(s)

---

**Friends of Music In-Course Scholarship [I0195]**

Established by the Friends of Music of the University of Guelph. Application is not required.

**Donor(s):** Friends of Music, Chair, Department of Music  
**Qualification(s):** Student registered in any honours degree program with a major or minor in Music who has completed a minimum of 10.00 credits toward that degree with the highest average (above 70%) in Music courses.

**Amount:** 1 award of $600

---

**Friends of Music In-Course Scholarship in Applied Music [I0497]**

Established by the Friends of Music of the University of Guelph. Application is not required.

**Donor(s):** Friends of Music, Chair, Department of Music  
**Qualification(s):** Student registered in any honours degree program with a major or minor in Music who has completed a minimum of 10.00 credits with a cumulative average of at least 70% and who has completed MUSC*3510 (Applied Music) with the highest grade above 80%.

**Amount:** 1 award of $600

---

**Geography Alumni Semester 4 Scholarship [I0368]**

Offered through the Alma Mater Fund by the Geography Alumni. Application is not required.

**Donor(s):** The Department of Geography, Environment and Geomatics  
**Qualification(s):** Student who has completed 10.0 course credits in a major honours program in the Department of Geography, Environment and Geomatics. The scholarship will be awarded competitively in September of each year based on cumulative academic performance.

**Amount:** 1 award of $1,500

---

**Geography Alumni Semester 6 Scholarship [I0385]**

Offered through the Alma Mater Fund by the Geography Alumni. Application is not required.

**Donor(s):** The Department of Geography, Environment and Geomatics  
**Qualification(s):** Student who has completed 15.0 course credits in a major honours program in the Department of Geography, Environment and Geomatics. The scholarship will be awarded competitively in September of each year based on cumulative academic performance.

**Amount:** 1 award of $1,500

---

**George A. Gray O.A.C. ‘51 Varsity Scholarships [I0487]**

Established in memory of George Gray, O.A.C. ’51, a Guelph football lineman and a great player of the game. Recipients will be selected based on demonstrated athletic and leadership qualities. Coaches will nominate students to the Athletics Awards Committee. Preference will be given to members of the varsity football team. Application is not required. Awarded in the fall semester.

**Donor(s):** Mrs. George A. Gray  
**Qualification(s):** In-course student-athlete who is a current member of a varsity team and has achieved a minimum 70% average in the previous academic year.

**Amount:** 2 awards of $1,250

---

**German Consulate Prize [C0110]**

Presented in the Spring semester.

**Donor(s):** Consulate General of the Federal Republic of Germany  
**Qualification(s):** Students who are graduating from an honours program in German Studies.

**Amount:** 3 awards of Book prizes

---

**Glenn Webb Education Scholarship/ GROWMARK Foundation OAC - Guelph Campus [I0897]**

Apply by May 15 to the OAC Awards Office with a letter of no more than two pages outlining leadership and involvement in extracurricular activities, community service or agricultural employment, farming background and career aspirations. Preference will be given to students with an Ontario farm background and are interested in pursuing full-time employment in agriculture in the province of Ontario after graduation. Selection will be made on leadership and involvement in the field of agriculture through extracurricular activities, part-time work, and/or volunteer work are eligible.

**Donor(s):** Growmark, Inc.  
**Qualification(s):** Students with a minimum cumulative average of 70% who have completed 10.0 credits of any OAC degree program.

**Amount:** 2 awards of $1,000
### Gloria Guthrie Memorial Music Prize [C0346]

**Application is not required.**

**Donor(s):** Estate of Professor James R. Guthrie  
**Qualification(s):** Student graduating in honours Music who has obtained the highest average above 80% in Music courses.

**Amount:** 1 award of $500

### Gold Medal in English [C0112]

This gold medal is offered by the faculty of the English Section of the School of Literatures and Performance Studies in English. Application is not required.

**Donor(s):** Faculty of the Department of English  
**Qualification(s):** Graduating student who has achieved the highest standing in honour work in English (providing that the student's standing is at 80%) and completed at least 15.0 course credits of the program at the University of Guelph.

**Amount:** 1 award of a Gold medal

### Gonder Family Student Accessibility Services Volunteer Scholarship [I0563]

Established in recognition of the diversity of student abilities and the varying challenges of undergraduate study. The recipient will be chosen on the basis of academic achievement with a preference to students enrolled in any LANG major of the B.Comm. program. Application is not required.

**Donor(s):** Dr. John and Mrs. Katherine Gonder  
**Qualification(s):** All students in the LANG who have completed between 10.0 and 15.0 course credits with a minimum 70% cumulative average, and who have been identified with a learning disability through the University of Guelph's Student Accessibility Services.

**Amount:** 1 award of $750

### Gordon Ashton Mathematical Science Scholarship [I0543]

This scholarship is named in honour of Professor Gordon Ashton, a founding member of the Department of Mathematics and Statistics. The recipient will be selected on the basis of the highest average in a minimum of 4.0 credits from semesters 3 and 4. A student may be considered for this award only once. This award is not tenable with the Wally Fraser Mathematical Science Scholarship (I0544) or the R.C. Moffatt Memorial Scholarship in Mathematical Science (I0536). Application is not required.

**Donor(s):** Department of Mathematics and Statistics and (retired) Professor C. Dixon  
**Qualification(s):** Students who have completed a minimum of 9.0 credits, but no more than 14.5 credits and are registered in a major offered by the Department of Mathematics and Statistics.

**Amount:** 1 award of $1,000

### Gordon Food Service Active Lifestyle Scholarships [I1104]

Gordon Food Service is the largest privately held, family managed food service company in North America, focused on establishing business alliances for over 120 years. Gordon Food Service is committed to the future of their company, which begins with exceptional people like you! Students apply by May 15th to the LANG awards committee with a 1-page letter describing the length and depth of their physically active lifestyle and experience or interest in logistics and/or operations. Hiking, biking, skiing, sledging, running, lifting weights, rock climbing and intramural sports are examples (but not exclusive to) of an active lifestyle. The recipients will be selected from a pool of applicants having met the criteria based on the highest grade in FARE 3310 “Operations Management,” or HTM 3120 “Service Operation Analysis.” In the event of a tie, the student with the highest cumulative average will be selected.

**Donor(s):** Gordon Food Service  
**Qualification(s):** Students registered in any major offered by the Gordon S. Lang School of Business and Economics, who live a physically active lifestyle, completed FARE*3310 “Operations Management,” or HTM*3120 “Service Operation Analysis”, have experience or interest in operations and/or logistics, and have a minimum of 70% cumulative average.

**Amount:** 2 awards of $2,500

### Governor General’s Medal [C0044]

Established by the Office of the Governor General of Canada. Application is not required.

**Donor(s):** The Chancellery  
**Qualification(s):** Restricted to those undergraduate students in any degree program who are graduating in June, or who have graduated in the previous two convocations, with the highest cumulative average.

**Amount:** 2 awards of a Silver medal each

### Guelph Creative Arts Association, Gordon Couling Scholarship [I0117]

Established by the Guelph Creative Arts Association in memory of Gordon Couling. The student who achieved the highest grade in Art History and Studio Art courses will be selected. Application is not required.

**Donor(s):** Guelph Creative Arts Association  
**Qualification(s):** Students registered in the Bachelor of Arts program with a major in Studio Art who has completed 12.5 credits and who has a cumulative average of at least 70% in all previous course attempts in Art History and Studio Art.

**Amount:** 1 award of $200

### Harry Barrett Memorial Scholarship [I1106]

This award was established through a gift from the estate of Mr. Harry Barrett, a graduate of OAC from 1949. Selection will be based on the highest cumulative average. Apply by May 15th to Student Finance with a written explanation of the planned experiential work related to bird studies. Preference will be given to students interested in research and/or study under the Bird Studies Canada program at their headquarters in Port Rowan, Ontario.

**Donor(s):** The Estate of Harry Barrett  
**Qualification(s):** Students registered in any program who will be participating in field work related to bird studies. Preference will be given to students interested in research and/or study under the Bird Studies Canada program at their headquarters in Port Rowan, Ontario.

**Amount:** 1 award of $1,500

### Highdale Farms Scholarship [I0348]

Established by Mr. Arthur Spoerri, who has had a professional career as an Economist. The student with the highest program average will be selected for one award and the second recipient will have the highest cumulative average from the listed counties. In the event the student with the highest average is also from the listed counties, the student with the second highest average will be selected. A student cannot hold two Highland Farm Scholarships at the same time. Application is not required.

**Donor(s):** Arthur Spoerri  
**Qualification(s):** Students registered in a program offered by the College of Engineering & Physical Sciences, excluding the Bachelor of Engineering program, who have completed minimum of 4.0 credits but no more than 16.0 credits and achieved at minimum 75% cumulative average. Preference given to students from Ottawa-Carleton, Dundas-Glengarry-Stormont, Grenville, Lanark, Prescott-Russell and Renfrew counties.

**Amount:** 2 awards of $5,000
International Development Studies Prizes [C0630]
Awarded annually to an outstanding student in each of the seven areas of emphasis in the International Development major. These prizes are awarded on the basis of academic excellence and demonstrated service to the community. Apply by letter (no more than two pages), outlining university and off-campus community service activities in Canada and abroad, to the attention of the Director of International Development Studies. Submit applications electronically by March 15th to ids@uoguelph.ca.

Donor(s): College of Social and Applied Human Sciences
Qualification(s): Students registered in their final year of studies in the honours Bachelor Arts program majoring in International Development who will be graduating in June, or who have graduated in the previous two convocations, with a minimum cumulative average of 80% in the previous two years of study.
Amount: 7 awards $200. + Certificate

International Undergraduate Scholarship [I0577]
Established through a student referendum approved by the undergraduate student body, to recognize international students’ academic merit along with involvement/leadership activities during their enrollment at the University of Guelph. Apply to Student Financial Services, by May 15, with a letter indicating involvement/extracurricular activity since entry to the University. This award can only be held once by the student.

Donor(s): International Student Organization (ISO)
Qualification(s): Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.
Amount: several at awards of $3,000

Istituto Italiano di Cultura Prize [I0143]
Application is not required.

Donor(s): Consulate General of the Republic of Italy
Qualification(s): Italian intending to continue the study of Italian presently enrolled in ITAL*2070 or ITAL*1070 who obtains the highest standing in the course.
Amount: 1 of a book prize

J. Percy Smith Drama Prize [C0261]
Application is not required.

Donor(s): Dr. J. Percy Smith
Qualification(s): Graduating honours student in Drama with high academic standing in Drama courses, who has also made a worthy contribution to drama activities within the School of English and Theatre Studies.
Amount: 1 award of $350

J.M. Bell Classics Scholarship [I0204]
Established in memory of Dr. John M. Bell, a distinguished teacher of classics and Chair of the Department of Languages and Literatures. Application is not required.

Donor(s): J.M. Bell Memorial Fund
Qualification(s): Student continuing in an honours program in Classics with the highest average (80% or above) in 4.00 credits from Classical Studies, Greek, or Latin courses beyond the 1000 level. The award may only be held once.
Amount: 1 award of $500

J.W. Skinner Honours Scholarship in Social Science [I0259]
Awarded to the student with the highest academic standing. Application is not required.

Donor(s): Faculty, staff, alumni and students, of the former College of Social Science
Qualification(s): Students who have completed between 12.75 and 15.0 credits and who are registered in an Honours program in the Departments of Geography, Political Science, Psychology, Sociology and Anthropology or a social science interdisciplinary program.
Amount: 1 award of $300

J.W. Skinner Medal in Social Science [C0260]
Established in honour of the many contributions of Dr. J.W. Skinner, a former Dean of the College of Social Sciences. Application is not required.

Donor(s): Faculty, staff, alumni and students, of the former College of Social Science
Qualification(s): Presented to the C.S.A.H.S. Winegard Medal nominee.
Amount: 1 award of a Medal

Jack and Lillian MacDonald Scholarship [E0379]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

Donor(s): Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald
Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).
Amount: 1 award of $900

Jack Madden Medal in Economic History [C0173]
The Department of Economics with the assistance of Dr. Warren Jestin, a B.A. and M.A. graduate and member of the University's Board of Governors from 1997 to 2003, offers this award in honour of Professor Jack Madden, founding member of the former College of Social Science and the Department of Economics. Application is not required. One award of a medal and $200.

Donor(s): Department of Economics with the assistance of Dr. Warren Jestin
Qualification(s): Student in honours Economics who has completed at least one Economic History course at any time throughout their program with the highest grade in the course and are graduating in the Winter semester, or have graduated in the previous Fall or Summer.
Amount: 1 award of $500, 1 Medal

Jakob Amstutz Prize [C0407]
Established in memory of Jakob Amstutz, a valued faculty member of the Philosophy department for more than twenty years. Application is not required.

Donor(s): Guelph Philosophical Society
Qualification(s): Student with the highest cumulative average who has graduated during the previous fall or winter or will be graduating in the summer of the current academic year from the Honours Philosophy program.
Amount: 1 award of $300

James L. Motin Prize for Academic and Extracurricular Excellence [C0344]
The department of Psychology recognizes its nominee for the Winegard Medal with a $500 prize. No application required.

Donor(s): The Department of Psychology
Qualification(s): Students registered in the Psychology major of the BA or BSc programs.
Amount: 1 award of $500

James Snell Scholarships for Outstanding Achievement in History [I1032]
Established in honour of James Snell, former faculty member of the History Department. These are awarded to the top student in each of the required core courses in the History program (HIST*2100, HIST*2600,) in the previous academic year. Application is not required.

Donor(s): Dr. James Snell and Mrs. Leslie Snell
Qualification(s): Students with a history specialization, who have completed one of the following required core courses in History: HIST*2100 and HIST*2600 and have completed no more than 10.0 credits.
Amount: 2 awards of $1,000

Jane Collins Scholarship [I0869]
Selection will be based on demonstrated significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities. Preference will be given to students engaged in community-based or community-focused projects addressing any social, political, legal, economic or health-related aspect of poverty or its prevention. The project must be part of a course of study rather than volunteer activity. Apply to the CSAHS Awards Committee by May 15 with a summary letter outlining prior significant contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities.

Donor(s): Mrs. Jane L. Collins, MAC BHSc 1955
Qualification(s): Students registered in any program offered by the College of Social and Applied Human Sciences who have completed 5.0 credits and will be participating in curriculum-embedded community-based experiential learning as part of a course of study in the following year.
Amount: 1 award of $1,000
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Qualification(s)</th>
<th>Amount</th>
<th>Donor(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janet Wardlaw Memorial Scholarship [10937]</td>
<td>Students registered in any program offered by LANG or CSAHS with a minimum cumulative average of 75% who have completed or are currently enrolled in curriculum–embedded experiential learning who demonstrates significant volunteer contribution to community–based service or extracurricular involvement.</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Newman Memorial Scholarship in Philosophy [10959]</td>
<td>Students majoring in Philosophy who have completed between 8.0 and 12.5 credits and have a minimum 75% cumulative average.</td>
<td>2 awards of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Burton Scholarship [10642]</td>
<td>Students registered in any program offered by the OAC who have completed between 10.0 and 12.0 credits with a minimum 70% average</td>
<td>1 award of $1,000</td>
<td>Dr. John Burton</td>
<td></td>
</tr>
<tr>
<td>John Deere Foundation of Canada Scholarship [10516]</td>
<td>Student registered in the B.Sc. Agr (Food Agriculture and Resource Economics), B.Sc.(Agr) Agronomy, B.A. (Food Agriculture and Resource Economics), or B.Comm (Agricultural Business) program who has completed a minimum of 15.0 credits.</td>
<td>1 award of $1,000</td>
<td>The John Deere Foundation of Canada</td>
<td></td>
</tr>
<tr>
<td>John Eccles Scholarship [10093]</td>
<td>Full-time student registered in semester 2, 3, 4, 5 or 6 and living in residence in the Winter semester who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in residence related activities. Residence Life Staff and paid members of Interhall Council and Hall Councils are not eligible.</td>
<td>1 award of $1,000</td>
<td>Student Housing Services</td>
<td></td>
</tr>
<tr>
<td>John F. Melby Honours Thesis Prize [C0189]</td>
<td>Members of the Department of Political Science who have completed an Honours thesis.</td>
<td>1 award of $1,000</td>
<td>The Board of Governors, University of Guelph</td>
<td></td>
</tr>
<tr>
<td>John Kenneth Galbraith Scholarship in Economics [10108]</td>
<td>Students registered in a major offered by the Department of Economics who have completed between 12.50 and 15.00 credits.</td>
<td>1 award of $600</td>
<td>The Board of Governors, University of Guelph</td>
<td></td>
</tr>
<tr>
<td>John Vanderkamp Memorial Scholarship in Economics [10525]</td>
<td>Student registered in any major offered by the Department of Economics courses, particularly in the applied Economics courses, and the award will be presented after the recipient has registered in a subsequent semester of an honours specialization in the B.A. in Economics.</td>
<td>1 award of $1,000</td>
<td>The family, friends and colleagues of John Vanderkamp</td>
<td></td>
</tr>
<tr>
<td>Johnson &amp; Johnson Diversity and Inclusion Scholarship in Science [11107]</td>
<td>Students registered in any program offered by the College of Biological Science or the College of Engineering and Physical Sciences with a minimum cumulative average of 75% who have completed 4.0 credits and who have demonstrated leadership to increase advocacy for diversity and inclusion in the community.</td>
<td>1 award of $1,000</td>
<td>Johnson &amp; Johnson</td>
<td></td>
</tr>
<tr>
<td>Johnson Entrepreneurship Scholarship [11077]</td>
<td>Applicant has demonstrated leadership ability within the student body. Apply by May 15th to the Office of the Associate Dean Academic in the College of Biological Sciences. Application is not required.</td>
<td>1 award of $1,000</td>
<td>Chris Johnson (BComm ’97) is the founder and CEO of Crown Capital Partners. He discovered his inner entrepreneur after graduating from U of G and wants to encourage business students to consider entrepreneurship as a potential career choice. Chris believes that entrepreneurship and innovation is critical for the Canadian economy to prosper. Students are encouraged to apply to the LANG Dean’s Office, or to <a href="mailto:lang.awards@uoguelph.ca">lang.awards@uoguelph.ca</a>, by May 15th with a letter indicating their entrepreneurial spirit, how they will further foster this spirit (through knowledge and skills acquisition) through projects in their final year of study, and how receiving this scholarship will aid the student in their contributions to Canada’s knowledge-based society, while fostering innovation within it. Selection will be based on the degree of originality and innovation of the applicant’s business ideas and propositions described in the letter.</td>
<td></td>
</tr>
</tbody>
</table>

Last Revision: July 4, 2019
Kaya Firth Scholarship in English [I1015]

Through the generosity of Train Trailer Rentals, this scholarship was established in honour of Kaya Firth, a fourth year English major who was devoted to her family, friends and her University newspaper – The Ontarian. Apply to the School of English and Theatre Studies (SETS) by May 15 with a portfolio of written work totaling no more than 8 pages. The portfolio may be an essay or excerpts and should focus on one or more of the following areas: Indigenous literature and storytelling, literature and the environment or gender and women’s literature. Selection will be based on demonstrated passion for literary study and have a unique and creative critical voice as evidenced by a portfolio of written work.

Donor(s): Train Trailer Rentals
Qualification(s): Students registered in an English Major within the College of Arts, who have completed a minimum of 13 credits, and no more than 18.5 credits, and who have a cumulative average of at least 80%. The student will have a passion for literary study and have a unique and creative critical voice demonstrated by a portfolio of written work totaling no more than 8 pages. The portfolio may be an essay or excerpt and should focus on one or more of the following areas: Indigenous literature and storytelling, literature and the environment or gender and women’s literature.

Amount: 1 award of $2,500

Lambda Foundation Scholarship in LBGT Studies [I0591]

This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LBGT peoples. Preference will be given to an applicant who is involved in the LBGT community as demonstrated by a record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a given student only once. Projects must have been completed or research proposals accepted within the past calendar year. Apply to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referencing involvement in the LBGT community and/or faculty support.

Donor(s): Lambda Foundation and other donors
Qualification(s): Students enrolled in a program with a thesis, a research essay, independent research project or course work programs pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.

Amount: 1 award of $1,000

LANG Distinguished Scholar Medal – Undergraduate (Vineyard Medal Nominee) [C0685]

To honour the outstanding achievements of a graduating undergraduate student in the Gordon S. Lang School of Business and Economics. Application not necessary.

Donor(s): Faculty, Staff, Alumni, and Students, Gordon S. Lang School of Business and Economics
Qualification(s): LANG’s Vineyard Medal nominee.

Amount: 1 Medal

LANG Distinguished Scholar Medal- Undergraduate (Highest Cumulative Average) [C0728]

This medal is presented to the student with the highest overall cumulative average. No application necessary.

Donor(s): Faculty, Staff, Alumni, and Students, Gordon S. Lang School of Business and Economics
Qualification(s): Students who are graduating in June, or who have graduated in the previous two convocations from the Gordon S. Lang School of Business and Economics.

Amount: 1 of a Medal

LANG-SA Student Leader Scholarship [I0895]

Volunteer activities may include but are not limited to holding a council position on LANG-SA executive or management teams, Board of Directors, Student Senator, Accredited Student Organizations (ASO) or a LANG affiliate club. Selection will be based on contributions to college-related activities. Apply to the LANG Awards Committee (lang.awards@uoguelph.ca) by May 15 with a resume and one page letter outlining volunteer/leadership experience within the college.

Donor(s): Gordon S. Lang School of Business and Economics Students’ Association.
Qualification(s): Full-time students registered in any program offered by the Gordon S. Lang School of Business and Economics who have completed a minimum of 4.0 credits and can demonstrate involvement in college-related volunteer/leadership activities.

Amount: 1 award of $1,000

Kip Hunter Prize [I0139]

For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May 1

Donor(s): Faculty, students and staff of the Philosophy Department
Qualification(s): Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.

Amount: 1 Book prize
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Amount</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mac 67 50th Anniversary Scholarship [I0990]</td>
<td>1 award of $1,500</td>
<td>Preference will be given to students in the Department of Family Relations and Applied Nutrition. If all else considered equal, this award will go to the student with the highest cumulative average.</td>
<td>The Class of MAC 1967</td>
<td>Selection will be based on personal commitment to one or more of the following areas: strengthening health systems and services, promoting universal coverage to quality health services, ensuring sustainable food production systems, promoting gender equity and social inclusiveness, alleviating and/or ending extreme poverty including hunger, and/or promoting clean water and sanitation. Evidence of the commitment will be provided in a one-page letter to the College of Social and Applied Human Sciences. If all else considered equal, award goes to student with highest cumulative average. Apply by May 15th to the CSAHS Awards Committee.</td>
</tr>
<tr>
<td>Linda S. Allen Memorial Graduation Prize [C0914]</td>
<td>1 award of $1,000</td>
<td>Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).</td>
<td>Students, staff, faculty and friends of Dr. Leonard Connolly</td>
<td>This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BS program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medallion, on the occasion of its second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant circumstances during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers back on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).</td>
</tr>
<tr>
<td>CSAHS Awards scholarship in Memory of Walter and May Stewart [I0813]</td>
<td>1 award of $3,500</td>
<td>Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).</td>
<td>Students registered in any program offered by the College of Social and Applied Human Sciences who demonstrate a commitment to the well-being of families and individuals through volunteering or experiential learning. Apply to the CSAHS Awards Committee by May 15th with a one-page letter outlining volunteer and community-based service and future participation in curriculum-embedded experiential learning opportunities in the following academic year.</td>
<td>Selection will be based on personal commitment to one or more of the following areas: strengthening health systems and services, promoting universal coverage to quality health services, ensuring sustainable food production systems, promoting gender equity and social inclusiveness, alleviating and/or ending extreme poverty including hunger, and/or promoting clean water and sanitation. Evidence of the commitment will be provided in a one-page letter to the Awards Committee of the College of Social and Applied Human Sciences. If all else considered equal, award goes to student with highest cumulative average.</td>
</tr>
<tr>
<td>Government of Canada Scholarship [I1047]</td>
<td>2 awards of $1,000</td>
<td>Students may be considered for this award only once. Application is not required.</td>
<td>The Department of Mathematics and Statistics</td>
<td>Established in honour of two founding fathers of calculus, selection will be based on highest combined average over 80% in MATH<em>1200 and MATH</em>1210 or equivalent. Not tenable with the T.D. Newton Memorial Scholarship (I0198) and Second Year Math &amp; Stats Scholarship (I0739). A student may be considered for this award only once. Application is not required.</td>
</tr>
<tr>
<td>CSAHS Awards scholarship in Memory of Walter and May Stewart [I0813]</td>
<td>1 award of $3,500</td>
<td>Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).</td>
<td>Students registered in any program offered by the College of Social and Applied Human Sciences who demonstrate a commitment to the well-being of families and individuals through volunteering or experiential learning. Apply to the CSAHS Awards Committee by May 15th with a one-page letter outlining volunteer and community-based service and future participation in curriculum-embedded experiential learning opportunities in the following academic year.</td>
<td>Selection will be based on personal commitment to one or more of the following areas: strengthening health systems and services, promoting universal coverage to quality health services, ensuring sustainable food production systems, promoting gender equity and social inclusiveness, alleviating and/or ending extreme poverty including hunger, and/or promoting clean water and sanitation. Evidence of the commitment will be provided in a one-page letter to the Awards Committee of the College of Social and Applied Human Sciences. If all else considered equal, award goes to student with highest cumulative average. Apply by May 15th to the College of Social and Applied Human Sciences. If all else considered equal, award goes to student with highest cumulative average. Apply by May 15th to the College of Social and Applied Human Sciences.</td>
</tr>
<tr>
<td>Mac 1971 Keith and Rosalind Slater Tribute Scholarship [I0830]</td>
<td>1 award of $1,000</td>
<td>Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.</td>
<td>Successful completion of a minimum of 8.0 credits with a cumulative average of at least 80% in any major within the College of Social and Applied Human Sciences who has completed a minimum of 8.0 credits with a cumulative average of at least 75% and is participating in curriculum-embedded experiential learning. The award can only be held once.</td>
<td>Established in recognition of Dr. Keith Slater, Honourary Class President for Mac '71, and Rosalind Slater. Selection will be based on leadership ability as demonstrated through extracurricular involvement, and/or dedication to volunteerism and community-based service in any of the following areas: family relations, applied nutrition, theatre arts, environment sciences, or children’s literacy. Apply to the CSAHS Awards Committee by May 15th with a resume and a one-page letter outlining extracurricular involvement, leadership experience, volunteerism and community-based service, as well as how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year. The award can only be held once.</td>
</tr>
<tr>
<td>Marion McKenzie Scholarships for Outstanding Achievement in History [I0470]</td>
<td>1 award of $1,000</td>
<td>Students who have completed one of the following required core courses in History: HIST<em>1050 and HIST</em>2450. The recipient for HIST<em>1050 must have completed no more than 5.0 credits; the recipient for HIST</em>2450, no more than 10.0 credits and be in the specialization in History.</td>
<td>Dr. James Snell and Mrs. Leslie Snell</td>
<td>These prizes have been established in memory of Marion McKenzie (1905-1994), a teacher who had a love of learning and a continuing curiosity about the world both past and present. These are awarded to the top student in each of the required core courses in the History program (HIST<em>1050, HIST</em>2450) in the previous academic year. Application is not required.</td>
</tr>
</tbody>
</table>
### IX. Scholarships and Other Awards, Bachelor of Arts

<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Qualification(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marlene Pike Memorial Scholarship [I0192]</strong></td>
<td>Provided by the family and friends of Marlene Pike. Application is not required.</td>
<td>1 award of $400</td>
</tr>
<tr>
<td><strong>Mary Alice &amp; Marion Munn Memorial Scholarship [I0418]</strong></td>
<td>Established by Dr. John Munn in memory of his mother Mary Alice (Harris) Munn, who for more than 50 years sang, played, taught, led choirs, and instilled her love of music in the Ripley and Kincardine area, and his sister Marion Catherine Munn, who followed her mother's example as a singer and choir leader. The scholarships are awarded to students who best combines excellent potential in the area of vocal studies with involvement in extra-curricular music activities, particularly choir or other forms of vocal performance. Eligible students will be contacted by the School of Fine Arts and Music by mid-August to schedule a live audition which will be held at the beginning of the fall semester. In the event of a tie, preference will be given to the applicant who has the highest average in music courses.</td>
<td>1 award of $2,500</td>
</tr>
<tr>
<td><strong>McKendry-Baker Memorial Scholarship [I0969]</strong></td>
<td>Established in memory of the late retired Guelph Deputy Chief of Police, Harold McKendry and his late wife Marlene McKendry for their lifetime dedication to policing, the community and their family. Through the careers of several family members, members of the McKendry family have served their communities with more than 105 years of police service. Students will apply by May 15 with a letter outlining the impact made in support of families and/or individuals in the community including their interest in pursuing a career linked to police services and one letter of reference supporting the impact. Selection will be based on the most significant impact made in support of families and/or individuals in the community through extracurricular activities. As evidenced by a letter of application and one letter of reference supporting the impact.</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td><strong>McLean Scholarships in English [I0188]</strong></td>
<td>These scholarships are offered in memory of Prof. Ernest Cyrus McLean, a member of O.A.C. from 1921 to 1960 and Chair of the Department of English from 1954 to 1960. Application is not required.</td>
<td>2 awards of $1,400</td>
</tr>
<tr>
<td><strong>McNeil Consumer Healthcare Diversity and Inclusion Scholarship in Science [I0947]</strong></td>
<td>Established to acknowledge students who demonstrate leadership by increasing advocacy for diversity and inclusion in the community. Selection will be based on greatest demonstrated leadership to increase advocacy for diversity and inclusion in the community through positions held, extracurricular activities and involvement on campus and in the community as evidenced by a letter of reference. Leadership that increases advocacy for inclusion; creating an environment that is safe, positive, respectful and diverse; recognizes and celebrates the range of social identity groups that comprise the community. Apply by May 15th to the CBS, Associate Dean Academic Office (<a href="mailto:csbada@uoguelph.ca">csbada@uoguelph.ca</a>) with two letters of reference. Preference will be given to leadership in the Guelph community. Students may hold this award only once.</td>
<td>1 award of $4,000</td>
</tr>
<tr>
<td><strong>Mentor Scholarship in Art History [I0799]</strong></td>
<td>Established in recognition of Dr. Clifford Malcolm Brown and Dr. Claudia Persi Haines (Carleton University). The successful applicant will be selected based on highest cumulative average. No application is necessary.</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td><strong>Michael J.F. Tompkins Prize [I0341]</strong></td>
<td>This award was established in memory of Michael Tompkins, Governor General's Medalist in 1990. Completed nomination forms and nominated essays should be submitted to the English Department by April 15th by a faculty member. The essays must be proofread and formatted to be free of the student’s name, instructor’s names, course name and any other identifying marker. Nomination forms available through the English Department. Application is not required.</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td><strong>Michael Scotcher Scholarly [I0235]</strong></td>
<td>Application is by submission of a portfolio and statement outlining future interest and plans for the future in the field of the Office of the Director of the School of Fine Art and Music by November 1. Selection will be based on the quality of portfolio submission and the content of the statement outlining future interests and plans.</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td><strong>Michele and Maria Vannelli Scholarship [I0988]</strong></td>
<td>Dr. Tony Vannelli, Dean of the College of Physical &amp; Engineering Science from 2007 to 2016, and his wife, Voula, established this award in honour of Dr. Vannelli’s parents, Michele and Maria Vannelli. Selection will be based on high cumulative average and demonstrated engagement in the community, preferably in a leadership role supported by two letters of reference from individuals who or organizations that have knowledge of and can attest to that experience. Apply to the College of Physical &amp; Engineering Science Awards Committee with a letter of application and two supporting reference letters from individuals or organizations attesting to community engagement experience by May 15th. This award is not tenable with the Emmanuel &amp; Kalliope Salamalekis Scholarship (I0987).</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td><strong>Murdo MacKinnon Scholarship [I0169]</strong></td>
<td>One or more scholarships given to students completing semesters 5, 6 or 7 during the Winter semester will be considered by the College Awards Committee. Application is not required.</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td><strong>Nancy Stoten Honours Prize in French [I0411]</strong></td>
<td>Provided by the parents, family and friends of Nancy Stoten, a former student in French Studies. Recipients of the Nancy Stoten Memorial Scholarship are not eligible for this prize. Application is not required.</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>
### Scholarships and Other Awards, Bachelor of Arts

#### Nancy Stoten Memorial Scholarship [I0106]
Provided by the parents, family and friends of Nancy Stoten, a former student in French Studies. Application is not required.

**Donor(s):** Mr. Michael and Mrs. Jean Stoten  
**Qualification(s):** Students enrolled in the French Studies with fewer than 15.50 credits who have completed, FREN*2020, FREN*2060 and FREN*2520. The student who has achieved the highest average calculated on the grades in the above courses will receive the award.

**Amount:** 1 award of $1,000

#### Nathan Max Goldman Choir Scholarships [I0774]
Established in honour of Mr. Goldman, an OAC graduate (1945 and 1947) and former President of the Philharmonia Society at the University of Guelph. The scholarships will support two students who demonstrate outstanding leadership and vision in the Symphonic Choir and/or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high vocal achievement and choral leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required as a recommendation by Choir Director will be made to the SOFAM Awards Committee.

**Donor(s):** Mrs. Anne Goldman and the family of Nathan Max Goldman  
**Qualification(s):** Students registered in any degree program who are currently a member of the University of Guelph Symphonic Choir and/or the Chamber Choir and have been a member of the University of Guelph Choirs for at least two years.

**Amount:** 2 awards of $1,000

#### Nick Westwood Memorial Scholarship in Spectroscopy [I0982]
In recognition of Professor Nick Westwood’s enduring contributions to the field of Molecular Spectroscopy, and his devotion to academic development and achievement at all levels, his family, friends and Department of Chemistry colleagues have established this award to honour his memory. Selection will be based on the highest grade in CHEM*2070 Structure and Spectroscopy. In the event of a tie, the award will go to the student with the highest cumulative average. Application not required.

**Donor(s):** Staff, faculty and friends of the Department of Chemistry  
**Qualification(s):** Students registered in any degree program with a minimum 80% cumulative average who have obtained a minimum of 80% in CHEM*2070 Structure and Spectroscopy.

**Amount:** 1 award of $1,000

#### Norma Bowen Memorial Scholarship in Psychology [I0154]
Established in memory of Norma Bowen, former faculty member in the Department of Psychology and herself a mature student. Preference will be given to students who have graduated from high school more than six years ago. No application required.

**Donor(s):** The Bowen family, friends and faculty colleagues  
**Qualification(s):** Students registered in the BA program majoring in Psychology or the BSc program majoring in Psychology: Brain and Cognition who have completed between 8.0 and 16.0 credits, including a minimum of 4.0 credits in Psychology, with a minimum cumulative average of 80% in Psychology courses.

**Amount:** 1 award of $750

#### O.A.C. '55 Scholarships [I0064]
Provided by the class of O.A.C. ’55. Recipients will have made an outstanding contribution to College life through academic proficiency and participation in extracurricular activities and can be considered to have done the most for the College, for fellow students and in their personal development. Apply by May 15 to the OAC Dean's Office (Awards) with a letter outlining your participation in Class/College/University activities. Awarded in the fall semester.

**Donor(s):** O.A.C. ’55  
**Qualification(s):** Students registered in any O.A.C. degree program or students registered in the B.ENG. program that have completed a minimum of 10.0 with at least a 70% cumulative average.

**Amount:** 1 award of $1,500

#### O.A.C. Centennial Graduate Prizes [C0209]
The Ontario Agricultural College celebrated its 100th Anniversary in 1974. Many organizations and companies associated with the agricultural industry provided funds in conjunction with the Centennial activities. Funds have been established in perpetuity as a permanent commemoration of the Centennial of the College. Apply to OAC Awards Office by April 1 with a letter outlining extracurricular activities. Selection will be based on academic achievement in semesters 7 and 8, as well as participation in extracurricular activities throughout the student’s university career.

**Donor(s):** Dean, O.A.C.  
**Qualification(s):** Students graduating from a degree program administered by the Ontario Agricultural College and who plan to pursue graduate studies in any department or school of the Ontario Agricultural College in the year of baccalaureate graduation. The fellowship will be based on academic achievement in semesters 7 and 8, as well as participation in extracurricular activities throughout the student’s university career.

**Amount:** 1 award of $2,200

#### O.A.C. Students’ Federation Medal [C0217]
Application is not required.

**Donor(s):** O.A.C.  
**Qualification(s):** Graduating student in an undergraduate degree program in a major in O.A.C. department who has been an outstanding leader in student activities at the College level throughout his or her University career.

**Amount:** 1 award of a Medal

#### OAC'45 Public Speaking Scholarship [I0200]
Offered by the Class of 45 O.A.C., on the occasion of their 40th anniversary. Apply with a one page letter summarizing public speaking experience to the OAC Awards Office by May 15. Selection will be based on demonstrated excellence and effort in public speaking within or outside of the University of Guelph (i.e. TEDx, Toastmasters, 4-H, community events).

**Donor(s):** Mr. Aubrey Hagar  
**Qualification(s):** Students who have completed a minimum of 15.0 credits in any program offered by OAC.

**Amount:** 1 award of $1,500

#### Oxford University Press Canada Drama Scholarship [I0177]
Application is not required.

**Donor(s):** Oxford University Press Canada  
**Qualification(s):** Student registered in the Drama major or minor who completes semester level 4 in the Winter, Spring, or Fall with the highest cumulative average in Drama courses.

**Amount:** 1 Book prize

#### Pal Fischer Mathematical Science Graduation Prize [C0182]
Selection is based on highest cumulative average. Application is not required.

**Donor(s):** Faculty members, who will be anonymous, through the College of Physical Science and Engineering Expendable Scholarship Fund  
**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations with a major offered by the Department of Mathematics & Statistics and achieved a minimum 80% cumulative average.

**Amount:** 1 award of $500, 1 Commemorative plaque

#### Parrish and Heimbecker Scholarship (formerly known as Heimbecker Scholarship in Entrepreneurship) [I0338]
Parrish and Heimbecker, Limited is a private, family owned business, founded in 1909 involved in many aspects of agri-business across Canada. This scholarship was established to honour Herb Heimbecker's service and contribution to the agri-food industry in Canada. Apply by May 15 to the OAC Awards Committee at oacaward@uoguelph.ca with a resume demonstrating the students’ level of involvement with the agricultural and food industry. Please include the name of the award and the Award ID number in the subject line of your email and on your application. Please also include your student ID number on your application. Selection will be based on demonstrated commitment to the agricultural and food industry measured by the approximate number of hours a student has dedicated per week to work and/or extracurricular and/or volunteer activities related to the agricultural and food industry during their Undergraduate degree.

**Donor(s):** Friends and Associates of Herb Heimbecker  
**Qualification(s):** Students registered in any OAC program, whom have completed a minimum of 10 credits who have demonstrated their passion and commitment to the agricultural and food industry through their extracurricular and/or volunteer activities during their Undergraduate degree and who aspire to have a career in the agricultural and food industry.

**Amount:** 1 award of $1,000
Philosophy Excellence Scholarship [11031]

Established by the Faculty of Philosophy to inspire students to choose Philosophy as a major. Selection will be based on highest grade in a Phil 1000 course. This award can only be held once. No application is required.

**Donor(s):** Department of Philosophy  
**Qualification(s):** Students majoring in Philosophy who have completed a 1000 level course in Philosophy and who have completed a minimum of 2.5 and a maximum of 7.5 credits.

**Amount:** 1 award of $1,500

Printmaking Prize [10239]

The recipient will be identified as the student judged to have made the outstanding academic contribution to the practice of printmaking during the semester. Application is not required.

**Donor(s):** Printmaking students and faculty of the Department of Fine Art  
**Qualification(s):** All students currently enrolled in a printmaking course and are considered by the Printmaking Selection Committee of the School of Fine Art and Music to have fulfilled all workshop responsibilities.

**Amount:** various awards of up to $1,000

Priscilla and Stanford ReidTrust Prize [10597]

Established in honour the first chair of the History Department, Stanford Reid, and his wife, Priscilla Reid to acknowledge the best paper written about the history of Presbyterianism and/or the Reformed tradition. Apply, by April 1, with a copy of the paper and a covering letter including contact information to the Department of History Awards Chair.

**Donor(s):** Priscilla and Stanford Reid Trust Fund  
**Qualification(s):** Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.

**Amount:** 1 award of $500

Professional Staff Association Future Leader Scholarship [11132]

This scholarship is provided to students whose leadership involvement makes a positive impact at the University of Guelph and/or the broader community. Apply by email to awards@uoguelph.ca by May 15 with one letter of reference and a personal statement (max. 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average will be awarded. This award may not be held more than once.

**Donor(s):** The Professional Staff Association (PSA)  
**Qualification(s):** Students registered in any program who demonstrate involvement in leadership opportunities that result in positive community impact, and who are from the immediate family of full-time, part-time, contractual or retired members of the Professional/Managerial Group at the University of Guelph. Preference will be given to a student that has not received the Professional Staff Association Scholarship in the same year.

**Amount:** 1 award of $1,500

Professional Staff Association Scholarship [10628]

This scholarship is provided to students with the highest cumulative average. Apply to Student Financial Services by May 15 by sending an email to awards@uoguelph.ca and include the name of the family member of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. This award may be held more than once, however, not in consecutive years. Preference will be given to students of current or retired P.S.A. members. Selection will be based on highest cumulative average.

**Donor(s):** Professional Staff Association  
**Qualification(s):** Full-time students who are from the immediate family, part-time or contractual Professional/Managerial Group employees of the University, and/or retired Professional/Managerial Group of the University of Guelph who have completed at least 5.0 credits and have a minimum 70% cumulative average.

**Amount:** 1 award of $1,500

Professor Victor J. Matthews Memorial Prize in Classics [C0681]

Established in memory of Dr. Victor J. Matthews, a distinguished teacher of Classics for almost 40 years and varsity cross-country team head coach. This award is given to the student with the highest cumulative average in 4.0 credits of courses taken in Classical Studies, Greek or Latin beyond the 2000 level. Application not required.

**Donor(s):** Family and friends of Professor Victor J. Matthews  
**Qualification(s):** Students graduating with a Major in Classical Studies or Classical Languages with a minimum average of 80% in 4.0 credits of Classical Studies, Greek or Latin courses beyond the 2000 level.

**Amount:** 1 award of $500

Project Hero Scholarship [10979]

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is an unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph  
**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Amount</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.A. Fisher Statistics Scholarship [I0102]</td>
<td></td>
<td>Students registered in a major offered by the Department of Mathematics and Statistics</td>
<td>Faculty, students and other affiliates of the Department of Mathematics and Statistics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with a minimum of 9.0 credits, but no more than 14.5 credits and have completed STAT<em>2040 and STAT</em>2050 or equivalent.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 award of $5,000</td>
<td></td>
</tr>
<tr>
<td>R.C. Moffatt Memorial Scholarship in Mathematical Science [I0536]</td>
<td></td>
<td>Students who have completed a minimum of 9.0 credits, but no more than 19.5 credits and are registered in a major offered by the Department of Mathematics &amp; Statistics and achieved an 80% cumulative average.</td>
<td>Estate of Professor R.C. Moffatt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 award of $1,500</td>
<td></td>
</tr>
<tr>
<td>Ralph and Edith Kidd Memorial Scholarship in Music [I0463]</td>
<td></td>
<td>Students registered in the Honours B.A. or other honours degree program with either a major or a minor in Music, who has completed at least 15.0 credits.</td>
<td>Friends of Music</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 award of $750</td>
<td></td>
</tr>
<tr>
<td>RB Palmer Horticultural Scholarship [I1083]</td>
<td></td>
<td>Students registered in a a program offered by the Ontario Agricultural College who demonstrate an interest in horticulture, plant genetics or plant breeding.</td>
<td>RB Palmer Horticultural Fund</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 award of $1,000</td>
<td></td>
</tr>
<tr>
<td>Resilience Scholarship (CEPS) [I1126]</td>
<td></td>
<td>Female students registered in any program within the School of Engineering, who have assumed roles of leadership and who have demonstrated resilience in response to personal life challenges or adversity (e.g. physical disability, financial constraints, socio-economic barriers).</td>
<td>The Angel Gabriel Foundation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 award of $5,000</td>
<td></td>
</tr>
</tbody>
</table>

**IX. Scholarships and Other Awards, Bachelor of Arts**

**Resilience Scholarship (LANG) [I1127]**

Apply by January 31st to the School of Engineering Awards Committee with a resume and a 500-word statement describing how the applicant has overcome adversity, demonstrated resiliency, leadership and perseverance, and how their actions have had a positive impact on others. Selection will be based on: 1. Resilience in response to personal life challenges or adversity (e.g. physical disability, financial constraints, socio-economic barriers); 2. Effective leadership, as evidenced through positions held, extracurricular activities, involvement on campus/in school and/or in the community; 3. Positive impact on others, the Gordon S. Lang School of Business and Economics, the University of Guelph, or the broader community, as evidenced in the 500-word statement. In the event of a tie the student with the highest cumulative average will be selected. Award cannot be held more than once.

**Ronald Hinch CJPW Scholarship [I0755]**

Established in honour of Dr. Ronald Hinch, a former faculty member in the Department of Sociology and Anthropology and the Area Coordinator for the Criminal Justice and Public Policy project. The recipient will be selected based on highest academic standing in these six required courses. No application is required.

**Rosemont Scholarship in Food Sustainability [C1082]**

The Rosemont Scholarship in Food Sustainability was established with the proceeds from the “Excellence in Food” benefit dinner held at the Globe Restaurant, in Rosemont, Ontario. The award recognizes the importance of sustainable food systems. Selection will be based on highest grade in AGR*4600. In the event of a tie, the student with the highest cumulative average will be selected. Application is not required.

**Ruth and Eber Pollard Prize in Canadian History [I0362]**

Established by the Guelph Historical Society and supported by Ruth and Eber Pollard in recognition of Ruth and Eber Pollard's contribution as President and Treasurer, respectively, of the Society during the years 1972 to 1993. Preference given to an essay with a local dimension. No application necessary.

**Ruth and Eber Pollard Scholarship in Canadian History [I0576]**

Established by Ruth and Eber Pollard, former President and Treasurer, respectively, of the Guelph Historical Society during the years 1972 to 1993. This award will be provided to the student who demonstrates a passion for Canadian History and ongoing participation in exercise, wellness, or athletics. Apply by May 15, to the department of History with a letter of no more than two pages outlining academic credentials in History and ongoing commitment to exercise and wellness.
**RWDI Scholarship for Engineering Student Athletes [I1135]**

Established by Rowan Williams Davies & Irwin Inc. (RWDI), an engineering consulting firm specializing in the science of buildings and structures. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary.

*Donor(s):* RWDI

*Qualification(s):* Full-time students registered in the Bachelor of Computing degree program or the Information Systems and Human Behaviour major of the Bachelor of Arts degree program who have completed at least 10.0 credits with a minimum cumulative average of 70%.

*Amount:* 1 award of $3,500

---

**Sociology & Anthropology Memorial Scholarship [I0632]**

Established by the Department in memory of deceased faculty, staff and retirees. This tribute began in memory of Helen Constand, a faculty member who passed away in 1973. The selection will be made on the basis of highest cumulative average. Application is not required.

*Donor(s):* Members of the Department of Sociology & Anthropology

*Qualification(s):* Full-time students registered in an honours major offered by the Department of Sociology & Anthropology who have completed between 10.0 and 12.5 credits with a minimum 80% cumulative average.

*Amount:* 1 award of $1,000

---

**Sociology & Anthropology Retiree Tribute Prize [C0633]**

Established by the Department to honour retiring members of the department. This tribute began with Samuel Sidlowsky who retired in 1991, and now also honours Wayne Thompson, retired in 1992. E.A. (Nora) Cebotarew, a 1993 retiree and Ted Hadwen, who retired in 1994. Apply by April 1 to the Department of Sociology and Anthropology Awards Committee Chair with a resume and letter outlining service involvements.

*Donor(s):* Members of the Department of Sociology & Anthropology

*Qualification(s):* Students that graduated in the previous fall or winter or will be graduating in the summer from an honours major in Sociology or Anthropology with a minimum 80% cumulative average.

*Amount:* 1 award of $1,000

---

**Sports Media and Sports Broadcasting Scholarships [I1035]**

Apply by May 15th to Student Financial Services by submitting a one page letter outlining involvement in sports media or sports broadcasting experience in the past year. Letters can be emailed to awards@uoguelph.ca. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minoring in Media and Cinema Studies and who have the highest GPA.

*Donor(s):* Rogers Media Inc.

*Qualification(s):* Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas. To be awarded to an undergraduate student first, then to a graduate student if no undergraduate students apply.

*Amount:* 2 awards of $2,500

---

**Stephanie Wilken Volunteer Scholarship [I0449]**

Established by the Wilken family in memory of Stephanie Wilken, BA 1995. Apply to Student Financial Services with letter indicating the kind and extent of volunteer activities at the Wellness Centre by October 1. Selection committee is the Senate Committee on Awards on the recommendation of the Student Wellness Educator at the Wellness Centre.

*Donor(s):* Bev and Darlene Wilken

*Qualification(s):* Student registered in any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre.

*Amount:* 1 award of $1,000

---

**Steve Harrington Memorial Scholarship [I1122]**

Established in memory of Steven Harrington, a proud alumus and passionate educator who was dedicated to making his community a better place. Students apply to the Political Science Awards Committee by May 15th with a one-page letter outlining the impact of their leadership through positions held, extra-curricular involvement, volunteering in school and communities as both a high school and undergraduate student. Selection will be based on the greatest impact made through leadership. Not tenable with the Class of 1983 Political Science Scholarship I1129 or the Dan Mathieson Scholarship I1124.

*Donor(s):* Carolyn Cooper

*Qualification(s):* Students registered in the Political Science (POLS) major or minor who have completed a minimum of 2.5 credits with demonstrated leadership as evidenced through positions held, extra-curricular involvement and volunteering in school and communities, as both a high school and undergraduate student.

*Amount:* 1 award of $1,500

---

**IX. Scholarships and Other Awards, Bachelor of Arts**

---

**Box of Light Scholarship [I1083]**

Established by the Scientific Notion of Things (SNT). Selection will be made on the basis of academic performance and a personal statement describing the impact of their leadership practice in a non-profit setting including the benefits both to the student and to the organization. Application is required.

*Donor(s):* Scientific Notion of Things (SNT)

*Qualification(s):* Students enrolled in a printmaking course at any level who produces the most outstanding print during the semester.

*Amount:* 3 awards of $200

---

**Sasha Leigh MacNeil Scholarship [I1051]**

This scholarship was established by Marilyn Entwistle, an alumnus of the College of Social and Applied Human Sciences, in honour of Sasha Leigh MacNeil who is pursuing doctoral studies in clinical psychology. Submit a one-page summary to the CSAHS Awards Committee by May 15th outlining past research work or a summary of the anticipated research to be conducted in the upcoming academic year ensuring the research was or will be in one or more of the following areas: adolescent mental health and well-being, cross-cultural psychology, behavioural neuroscience, brain and cognition, health psychology or personality psychology. In addition, describe the intention for pursuing a graduate career in psychology and, if applicable, provide evidence of a graduate program application and status. The student who demonstrates, through their upcoming or completed research, the greatest commitment to improving one or more of the following areas: adolescent mental health and well-being, cross-cultural psychology, behavioural neuroscience, brain and cognition, health psychology or personality psychology as evidenced by past research projects and a further commitment to continuing research in psychology at the graduate level. If all else considered equal, this award will go to student with highest cumulative average.

*Donor(s):* Marilyn Entwistle

*Qualification(s):* Students registered in the BA program majoring in Psychology within the College of Social and Applied Human Sciences who are pursuing or have conducted psychological research in one or more of the following areas: adolescent mental health and well-being, cross-cultural psychology, behavioural neuroscience, brain and cognition, health psychology or personality psychology and who have demonstrated an interest in pursuing a graduate career in psychology. Preference will be given to students pursuing or completing research in the upcoming academic year.

*Amount:* 1 award of $1,000

---

**Scotiabank Scholarships in Leadership [I0834]**

Apply to the Department of Management Awards Committee by May 15 with: 1) A 500 word personal statement describing the impact of their leadership practice in a non-profit setting including the benefits both to the student and to the organization; 2) Reference letter(s) from the organization(s) in which the leadership practice took place. In the event of a tie, the award will go to the student with the highest cumulative average. Please submit your application by email to: dom.awards@uoguelph.ca

*Donor(s):* Scotiabank

*Qualification(s):* Students who have completed the Foundations of Leadership course (HROB*2010) and either completed the required 120 hours of leadership practice for the undergraduate Certificate in Leadership in a non-profit setting or are registered in the Leadership and Organizational Management major of the BComm program and have demonstrated exceptional leadership in a non-profit setting.

*Amount:* 5 awards of $1,000
Summerlee Humanitarian Scholarships [10964]
The Summerlee Humanitarian Scholarships are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues in global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a female athlete (varsity athlete should identify in their letter), while applicants who demonstrate past significant impacts in improving local communities/groups will be considered, preference will be given to applicants with strong proven international humanitarian efforts. Recipients must adhere to the University of Guelph’s Safe Travel Policy.

Donor(s): The Angel Gabriel Foundation
Qualification(s): Students registered in any program with no more than 17.0 credits completed who have demonstrated a commitment to humanitarian efforts including but not limited to those affecting refugees, displaced persons, and populations affected by conflict and natural disasters through volunteer positions, prior employment and/or extracurricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.
Amount: 5 awards of $10,000 ($5,000 in each of the fall and winter semesters), plus an additional up to $4,000 to support travel costs

Susan Travers Memorial Scholarship [10975]
Established by friends, family and colleagues in Alumni Affairs and Development in Memory of Susan Travers. Susan believed in the value of education. She worked for the University of Guelph as a member of Alumni Affairs and Development and in the Department of Business. She not only encouraged her children to pursue post-secondary education, but led by example, pursuing her university degree as a mature student. Preference will be given to students registered in CSASHS and LANG. Selection will be based on highest cumulative average. No application required.

Donor(s): The staff in Alumni Affairs and Development and Friends
Qualification(s): Students who were accepted to the University of Guelph as a “mature student” applicant and who are currently registered in any degree program.
Amount: 1 award of $1,000

Swiss Embassy Prizes [C0275]
Offered by the Swiss Consulate. Application is not required.

Donor(s): Mr. H.W. Gasser, Swiss Embassy of Ottawa
Qualification(s): Outstanding honours students in French, German and Italian at the end of the 8th semester.
Amount: 3 awards of Book prizes

T.D. Newton Memorial Scholarship [10198]
Established in honour of Professor Ted Newton, the founding chair of the Department of Mathematics and Statistics. Selection is based on the highest average in a minimum of 4.0 credits. A student may be considered for this award once only. This award is not tenable with Leibniz/Newton Scholarship (I0156) or the Second Year Math and Statistics, and Resource Economics and a faculty member of the Ontario Agricultural College from 1970 to 1991. Application is not required.

Donor(s): Department of Mathematics and Statistics
Qualification(s): Students registered in a major offered by the Department of Mathematics and Statistics who have completed a minimum of 4.0 credits but no more than 8.5 credits.
Amount: 1 award of $1,500

T.K. Warley Agrifood Policy Prize [10212]
Established by Prof. T.K. Warley, former Chair of the Department of Food Agriculture and Resource Economics and a faculty member of the Ontario Agricultural College from 1970 to 1991. Application is not required.

Donor(s): Professor T.K. Warley
Qualification(s): Student providing the best term paper written on a public policy issue relating to the agrifood system or rural society in courses such as AGEC*3030 Price and Production Analysis, AGEC*4000 Agricultural and Food Policy, and AGEC*4720 Special Study in Food Agriculture and Resource Economics.
Amount: 1 award of $500

Thomas H. Peters Scholarship [10233]
Application is not required.

Donor(s): Friends and associates of Thomas H. Peters
Qualification(s): Student in any academic program of the University who has completed courses in Land Reclamation (e.g. CROP*2280, SOIL*3200), with a minimum 1.0 credits completed. Applicants must have a minimum of 70% cumulative average and have demonstrated an interest and aptitude in the area of crops and land reclamation.
Amount: 1 award of $500

Toroento District Beekeeper’s Association Scholarship [10285]
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application is not required.

Donor(s): Mr. Jack Robinson
Qualification(s): The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.
Amount: 1 award of $500

Truscott Family Scholarship in Justice Studies [10775]
Apply by Sept 30 with an e-mail to the Coordinator, Criminal Justice and Public Policy Program at cjpp@uoguelph.ca demonstrating an interest in and previous contribution to social justice issues. Applicants must also provide contact information for teachers and/or community leaders who were involved in this work. Selection will be based on the most significant contributions made to social justice issues.

Donor(s): Truscott Family
Qualification(s): Students registered in their first semester of the BA program majoring in Criminal Justice and Public Policy who have made contributions to social justice issues.
Amount: 2 awards of $1,500

Tucker Scholarship for Women in Mathematical Science [10483]
Established by Emma Tucker, B.Sc., Statistics, 1996, to encourage women in the study of Mathematics and Statistics. Selection will be based on high cumulative average and contributions made to student life within the department. Apply by May 15th to the Department of Mathematics and Statistics main office with a letter outlining contributions to student life within the department.

Donor(s): Emma Tucker, B.Sc.’96
Qualification(s): Female students registered full-time in a major offered by the Department of Mathematics and Statistics who have completed a minimum 9.0 credits and demonstrated contributions to student life within the department.
Amount: 1 award of $500

United Steelworkers Local 4120 Scholarship [10293]
Apply to Student Financial Services by January 31 and provide the name of the USWA member and relationship to the applicant. If there is more than one eligible candidate, the award will go to the one who has attained the highest relative class standing in his or her previous full-time semester.

Donor(s): United Steelworkers LU4120
Qualification(s): Student who is a member or former member, or who is from the immediate family of a member of United Steelworkers LU 4120, and who is entering semester 2, 3, or 4 of a degree or diploma program in the Winter semester with a minimum 70% cumulative average.
Amount: 1 award of $1,000

University of Guelph Alumni Legacy Scholarship [10735]
Funded through donations made to the University of Guelph Alumni Memorial Fund in memory of deceased alumni. The recipient will be selected based on academic achievement and volunteer contributions to the University of Guelph community. Apply to Student Financial Services by May 15 with a cover letter indicating name, degree and year of graduation of alumna/alumnus relative and a resume or summary of leadership and volunteer contributions to the University of Guelph community.

Donor(s): Various donors c/o University of Guelph Alumni Association Memorial Fund
Qualification(s): Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with both a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumna/us of the University of Guelph or its founding colleges.
Amount: 1 award of $1,000
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Qualification(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wallace and Audrey Little Scholarship [I0860]</td>
<td>The Wallace and Audrey Little Scholarship has been established in recognition of them by their family. Apply to the History Department Awards Committee by May 15 with a one page letter outlining extracurricular volunteer experience. The recipient who demonstrates the most significant volunteer experience will be selected.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Bethany Philpott</td>
<td><strong>Qualification(s):</strong> Full-time students registered in the History major who have a minimum cumulative average of 80% and have completed a minimum of 4.0 credits but not more than 10.0 credits and demonstrated volunteer experience.</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td><strong>Wally Fraser Mathematical Science Scholarship [I0544]</strong></td>
<td>This scholarship is named in honour of Professor Wally Fraser, a founding member of the Department of Mathematics and Statistics. The recipient will be selected on the basis of the highest average in a minimum of 4.0 credits from semesters 3 and 4. A student may be considered for this award only once. This award is not tenable with Gordon Ashton Mathematical Science Scholarship (I0543) or the R.C. Moffat Memorial Scholarship in Mathematical Science (I0536). Application is not required.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> The Department of Mathematics and Statistics and (retired) Professor Dixon More, C.E.P.S.</td>
<td><strong>Qualification(s):</strong> Students who are registered in a major offered by the Department of Mathematics &amp; Statistics who have completed a minimum of 9.0 credits, but no more than 14.5 credits.</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td><strong>Warren Jestin Scholarship in Canadian Economic Policy [I0557]</strong></td>
<td>Dr. Warren Jestin, a B.A. and M.A. economics graduate of the University of Guelph and a member of the University’s Board of Governors from 1997 to 2003, provides this award to a student registered in an honours degree in either the B.A program with a major in Economics or the B.Com program with a major in Management Economics in Industry and Finance. The award winner will have achieved the highest cumulative average across all economics policy courses taken. Application is not required.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Warren Jestin</td>
<td><strong>Qualification(s):</strong> Full-time registered in BAH:ECON or BCOM:MEIF that has completed a minimum of two credits in the 3000 and 4000 level courses oriented towards economic policy, has achieved a minimum average of 80% in those courses, and has completed at least 15.0 credits towards their degree completion.</td>
<td>1 award of $1,500</td>
</tr>
<tr>
<td><strong>Weiner Family Mathematical Science Scholarships (First Year) [I1055]</strong></td>
<td>Established via a generous donation from the Weiner Family. Professor Jack Weiner taught in the Department of Mathematics &amp; Statistics from 1982-2011. A student may be considered for this award only once. This award is not tenable with the Leibniz/Newton Scholarship (I0156) or the T.D. Newton Scholarship (I0198). Application is not required.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Jack Weiner</td>
<td><strong>Qualification(s):</strong> Students registered in any program offered by OAC who have completed 10.0 credits or more and who are engaged in swine related studies.</td>
<td>1 award of $2,000</td>
</tr>
<tr>
<td><strong>Weiner Family Mathematical Science Scholarships (Second Year) [I1047]</strong></td>
<td>Established via a generous donation from the Weiner Family. Professor Jack Weiner taught in the Department of Mathematics &amp; Statistics from 1982-2011. The recipient will be selected on the basis of highest average in a minimum of 4.0 credits from semesters 3 and 4. This award is not tenable with the Gordon Ashton Mathematical Science Scholarship (I0543), the Wally Fraser Mathematical Science Scholarship (I0544), or the R.C. Moffat Memorial Scholarship in Mathematical Science (I0536).</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Jack Weiner</td>
<td><strong>Qualification(s):</strong> Students registered in a major offered by the Department of Mathematics &amp; Statistics who have completed a minimum of 9.0 credits, but no more than 14.5 credits, with a minimum 75% cumulative average.</td>
<td>1 award of $1,500</td>
</tr>
</tbody>
</table>
### Weiner Family Mathematical Science Scholarships (Third Year) [I1048]

Established via a generous donation from the Weiner Family. Professor Jack Weiner taught in the Department of Mathematics & Statistics from 1982-2011. This award is not tenable via the R.C. Moffatt Memorial Scholarship in Mathematical Science (I0536), or the Year 3 Mathematical Science Scholarship (I0506).

**Donor(s):** Jack Weiner

**Qualification(s):** Students who have completed a minimum of 14.0 credits, but no more than 19.5 credits, with a minimum 75% cumulative average. The recipient will be selected on the basis of highest average in a minimum of 4.0 credits from semesters 5 and 6. A student may be considered for this award only once.

**Amount:** 1 award of $1,500

### William Furlong Scholarship in Economics [I0886]

The Department of Economics & Finance offers this scholarship in honour of Professor William Furlong, a long-term member of the Department of Economics & Finance and a leader in the scholarship of teaching principles of microeconomics, to the student with the highest final grade in Introductory Microeconomics (ECON*1050) in the fall semester. Application is not required.

**Donor(s):** Colleagues & Friends of Dr. William Furlong

**Qualification(s):** Students registered in any program offered by the Gordon S. Lang School of Business and Economics who complete the course Introductory Microeconomics (ECON*1050) in the Fall semester.

**Amount:** 1 award of $900

### Wilma Hollywood Memorial Scholarship [I0509]

Established by the Department of Psychology, in honour of the late Wilma Hollywood, a long-serving staff member. Application is not required.

**Donor(s):** Department of Psychology

**Qualification(s):** Student majoring in Psychology in either the B.A. or B.Sc. program who has achieved the highest cumulative average in the core courses.

**Amount:** 1 award of $200

### In-course Scholarships with Financial Need

#### Agnes Yuen Leadership Scholarship [I4401]

Apply by October 7 to Student Financial Services with a completed University of Guelph Financial Need Assessment Form along with a statement of up to 500 words outlining leadership and involvement in voluntary activities. Selection will be based on demonstrated exemplary leadership through involvement with on campus or off-campus volunteer activities (student associations/charitable or non-profit organizations) as described in a statement. ACCESS AWARD

**Donor(s):** Mr. John and Mrs. Agnes Yuen with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Students registered in a program offered by the Gordon S. Lang School of Business and Economics who have completed between 5.0 and 17.5 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $2,400

#### Alf and Mary Hales Undergraduate Scholarship in Political Science [I4511]

Established by Alf Hales, B.Sc. ‘34, Member of Parliament 1957-74 and his wife Mary Hales, D.H.E. ’32, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Alf and Mary Hales with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in the B.A.H. program majoring in Political Science who have completed at least 15.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).

**Amount:** 1 award of $1,300

#### Barbara A. Bowen Scholarship [I4390]

Established by Barbara A. Bowen, MAC ’57. Preference will be given to students registered in Department of Family Relations and Nutrition. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Barbara A. Bowen with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Students who have a minimum 75% average and are registered in any degree program in the College of Social and Applied Human Science with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $5,500

#### Beatrice Youngman Prize in Music [I4378]

To honour Beatrice Youngman, the driving force of the Guelph Music Club for over twenty years, a former piano teacher, a volunteer and President of the club, and a recognized contributor to music and culture within Guelph, the Guelph Music Club, with the aid of the Ontario government's OSOTF program, has provided this scholarship. Preference will be given to students majoring in Music in the BA program and the recipient will have achieved the highest cumulative average. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** The Guelph Music Club with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in a minor or major in Music, with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $2,000

#### Brian Kenneth Howard Memorial Scholarship [I4548]

Established by Kenneth and Irene Howard in memory of their son, Brian Kenneth Howard. Awarded to a student assessed as having financial need with a preference given to students from York, Durham or Simcoe counties. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Kenneth and Irene Howard with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Student registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $3,000

#### C.E.P.S. Dean’s Scholarship - ACCESS [I4527]

Established with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. This award may be held once only.

**Donor(s):** Established by a number of industrial, commercial and public sector corporations with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with demonstrated financial need, registered in an honours program offered by the College of Engineering & Physical Sciences who have completed a minimum of 4.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).

**Amount:** 1 award of $1,000
<table>
<thead>
<tr>
<th>Scholarship Program</th>
<th>Details</th>
</tr>
</thead>
</table>
| **CEPS Computer Science ACCESS Scholarships [I4551]** | Established by the School of Computer Science, friends and alumni and with the aid of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.  
**Donor(s):** School of Computer Science, friends and alumni and with the aid of the Ontario government’s OSOTF program.  
**Qualification(s):** Students registered in an honours program offered by the College of Engineering & Physical Sciences who have completed 4.0 credits, with demonstrated financial need. Preference will be given to students in the BCOMP program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.  
**Amount:** 1 award of $1,000 |

| **City of Guelph 175th Anniversary Scholarship [I0515]** | Funded by a leadership gift from the City of Guelph and donations from business and community leaders, this scholarship was established in 2002. Apply to Student Financial Services by October 7 with a letter describing volunteer activities, one reference letter from an individual familiar with the volunteer and/or community service contributions, and a completed Financial Need Assessment Form (N.A.F.). Selection will include equally weighted consideration of academic achievement, leadership both on and off campus and financial need. This award may be held only once.  
**Donor(s):** The Guelph Community Foundation  
**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.  
**Amount:** 1 award of $2,000 |

| **College of Arts Honours Scholarships [I4524]** | Established by supporters of the College of Arts, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.  
**ACCESS AWARD**  
**Donor(s):** Numerous Donors with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need in an honours program in the College of Arts. A minimum cumulative average of 80% and registration in semester 5, 6 or 7 is required at the time of application. Awarded in semesters 7 or 8. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.  
**Amount:** 5 awards of $500 |

| **Dr. Kenneth & Nancy Lawless [I4552]** | Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.  
**ACCESS AWARD**  
**Donor(s):** Dr. Kenneth W. Lawless with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Student registered in any program offered by the Ontario Agricultural College who has completed at least 5 credits with a minimum cumulative average of 75% and has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award.  
**Amount:** 1 award of $2,700 |

| **Earl B. MacNaughton C.E.P.S. ACCESS Scholarships [I4172]** | Established by friends, faculty, staff, alumni and students of the University to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical and Engineering Science, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.  
**ACCESS AWARD**  
**Donor(s):** Earl B. MacNaughton with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students currently registered in an honours program in the College Engineering and Physical Sciences with high academic standing, demonstrated financial need, and who have completed a minimum of 15.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.  
**Amount:** 2 awards of $1,500 |

| **Eleanor Morgan & Bill Archibald Scholarships [I4540]** | The family of Eleanor and Bill Archibald, with the assistance of the Ontario government’s OSOTF program, provide this scholarship in memory of their parents. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining community involvement to Student Financial Services by October 7.  
**ACCESS AWARD**  
**Donor(s):** The Family of Eleanor & Bill Archibald with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students registered in any program with a minimum of 5.0 credits who have cumulative 70% average, has demonstrated community involvement, and financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.  
**Amount:** 1 award of $2,500 |

| **Elise M. Piovesan Memorial Scholarship [I0912]** | Established to honour Elise M. Piovesan, beloved Aunt, friend and life-long music lover. The two recipients will be the students with demonstrated financial need and highest cumulative averages. This scholarship is not tenable with the Beatrice Youngman Prize in Music. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.  
**Donor(s):** Mr. Paul Case  
**Qualification(s):** Students registered in a major or minor in Music with demonstrated financial need.  
**Amount:** 2 awards of $2,000 |

| **Erin Demers Memorial Scholarship [I0406]** | The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.), along with one supporting reference letter from a Residence Assistant, Residence Manager, or Residence Officer.  
**Donor(s):** Family and friends of Erin Katrina Demers  
**Qualification(s):** Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.  
**Amount:** 1 award of $1,800 |

| **Euclid-Hitachi Scholarships [I4517]** | Established by Euclid-Hitachi of Canada Ltd., with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7.  
**ACCESS AWARD**  
**Donor(s):** Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.  
**Amount:** 2 awards of $1,500 |
Gerald and Mary Henley Rubio Scholarship [I4534]

With the assistance of the Ontario government’s OSOTF program, this scholarship was established for an outstanding student majoring in English. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. The student with the greatest financial need will be selected. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. **ACCESS AWARD**

**Donor(s):** Professor Mary Henley Rubio and the late Gerald Rubio with matching funding through the Student Opportunities Trust Fund

**Qualification(s):** B.A. students majoring in English, who have completed at least 5.0 credits, and have a cumulative average of at least 80%. If no students majoring in English are eligible, a student majoring in History may be selected using the same criteria. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,300

Gordon Ashton ACCESS Scholarship [I4535]

Established in memory of Prof. Gordon Ashton, member of the Department of Physics and Mathematics (1956-1966) and the Department of Mathematics and Statistics (1966-1986). Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. Selection will be based on financial need. **ACCESS AWARD**

**Donor(s):** C. Dixon More with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in a major offered by the Department of Mathematics & Statistics who have completed a minimum of 10.0 credits who have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $600

Graham Family Incentive Scholarship [I4506]

Provided by Harvey Graham (O.A.C.’39) with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. **ACCESS AWARD**

**Donor(s):** Harvey Graham O.A.C.’39 with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students entering the fourth year of a four year degree program, maintaining at least a 70% program average and demonstrating financial need, who have previously received the Harvey Graham Bursary. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $6,000

Guelph Campus Co-operative Centennial Scholarship [I0867]

In recognition of the Guelph Campus Co-operative’s centennial anniversary and the students who benefit from it, this scholarship is awarded to a student who has demonstrated financial need. Preference will be given to students who are members of the Guelph Campus Co-operative. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form and a photocopy of your valid co-operative membership card.

**Donor(s):** Guelph Campus Co-operative

**Qualification(s):** Students registered in any program at the University of Guelph who have completed a minimum of 5.0 credits with a minimum cumulative average of 75% and have demonstrated financial need.

**Amount:** 1 award of $1,000

Guelph Philosophical Society Scholarship [I4119]

Established by the Guelph Philosophical Society with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. **ACCESS AWARD**

**Donor(s):** The Guelph Philosophical Society with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with a major in Philosophy, in semesters 1 to 4, have a minimum cumulative average of 80% and have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $750

Jay Majithia Scholarship [I4518]

Provided to honour Professor Jay Majithia, in recognition of his support and leadership while a faculty member in the Department of Computing and Information Science, by Margaret Middleton, C.E.P.S., ’86 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7 and attach a letter stating research interest and/or involvement. **ACCESS AWARD**

**Donor(s):** Mrs. Margaret L. Middleton with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Computer and Information Science students with demonstrated financial need who have a minimum cumulative program average of 70%. Preference will be given to eligible students who are applying for, or participating in, departmental research, including a special project or an independent study option. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,000

Lin Coburn Memorial Scholarship [I4539]

The scholarship will be awarded to the student with highest cumulative average, with a preference given to mature or to a student returning to post-secondary studies after a break of at least 3 consecutive semesters. Apply to Student Financial Services with a completed Financial Need Assessment form by October 7. Students wishing to identify themselves as a mature or returning student may do so by including a letter (maximum 1 page) outlining why they have decided to return to university. **ACCESS AWARD**

**Donor(s):** Family, Friends, and Colleagues with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in any degree program offered by the College of Social and Applied Human Science with a minimum 75% average with demonstrated financial need.

**Amount:** 1 award of $1,500

MAC 1954 Scholarship [I0911]

Preference will be given to students registered in the department of Family Relations and Applied Nutrition. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** Class of MAC 1954

**Qualification(s):** Students registered in any degree program offered by the College of Social and Applied Human Science with a minimum 75% average with demonstrated financial need.

**Amount:** 1 award of $1,500

Michael and Virginia Walsh Scholarship in Philosophy [I4529]

Established by Michael Walsh, BA’69, MA’70, PhD’93, and Virginia (Trimble) Walsh, BA’72 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. **ACCESS AWARD**

**Donor(s):** E. Michael Walsh, BA ’69, MA ’70, PhD ’93 and D. Virginia (Trimble) Walsh, BA ’72 with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in the Philosophy major of the B.A. program with at least 10.0 credits completed and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $2,000

Nora Spence Memorial Scholarship [I4394]

This scholarship was created by George and Jane Spence in memory of their daughter Nora Spence, O.A.C., B.Sc.’06 with the aid of the Ontario government’s OSOTF program. Selection will be based high academic achievement. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. **ACCESS AWARD**

**Donor(s):** Jane and George Spence with matching funding through the Ontario Student Support program

**Qualification(s):** B.Sc. students registered in a major offered by O.A.C. who have a minimum cumulative average of 75% and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,750
### Norma B. and the Late Mr. R. Douglas Kennedy Scholarship [10697]

#### Qualifications:
- Students registered in any degree program with a minimum 75% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program.

#### Amount:
- 3 awards of $500

### Student Housing Services Scholarship [10696]

#### Qualifications:
- Students registered in any degree program who plan to reside in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average.

#### Amount:
- 2 awards of $500

### Scottish Studies Foundation Scholarship [14541]

#### Qualifications:
- Students who have completed a minimum 10.0 credits and has taken or is taking HIST*2000 or HIST*2500, and at least one of the following: HIST*3030, HIST*3140, HIST*3530, HIST*4040, or HIST*4050. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

#### Amount:
- 3 awards of $500

### William & Nona Heaslip Scholarship [10589]

#### Qualifications:
- Students that have completed 4.0 credits but no more than 6.0 credits
- Students registered in the Political Science major of the B.A.H.
- Students admitted as a "mature student" (as defined in the University of Guelph Undergraduate Calendar) who is registered in the Bachelor of Arts program with a minimum 75% cumulative average or 75% admission average and who have demonstrated financial need. Preference will be given, first, to Philosophy majors registered in semester one with a minimum admission average of 75% and second, to Philosophy majors in any semester.

#### Amount:
- 1 award of $2,500

### R. Douglas and Kathleen Kennedy Scholarship in O.A.C. [10547]

#### Qualifications:
- Students admitted as a "mature student" (as defined in the University of Guelph Undergraduate Calendar) who is registered in the Bachelor of Arts program with a minimum 75% cumulative average or 75% admission average and who have demonstrated financial need. Preference will be given, first, to Philosophy majors registered in semester one with a minimum admission average of 75% and second, to Philosophy majors in any semester.

#### Amount:
- 1 award of $1,200

### Scottish Studies Foundation Scholarship [10589]

#### Qualifications:
- Students registered in the Scottish Studies major of the B.A.H. program who have completed at least 10.0 credits and have a minimum cumulative average of 70%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

#### Amount:
- 1 award of $1,200
Yeandle Family Scholarships [I3546]
Provided by the Estate of Audrey Yeandle, a Mac'25 graduate and life-long supporter of the University, with the assistance of the Ontario government's OSOTF program. Awards will be made on the basis of financial need and academic achievement. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): The Estate of Audrey Yeandle with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students registered in a program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards up to $2,000

In-course Bursaries

Acer Saccharum Bursary [I3083]
Apply by October 7 to Student Financial Services with a Financial Need Assessment Form and confirmation of registration with Student Accessibility Services.

Donor(s): Steven Ardron and Celine Batterink

Qualification(s): Students registered in any degree program at the University of Guelph who have demonstrated financial need and are registered with Student Accessibility Services.

Amount: 1 award of $1,000

Brinson Partners Inc. Bursaries [I3526]
Brinson Partners Inc., with the assistance of the Ontario government's OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Brinson Partners Inc. with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,500

Burnbrae Farms Bursaries [I3525]
Established by Burnbrae Farms, with the assistance of the Ontario government's OSOTF program to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement explaining interests in poultry science to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,000

Campbell-Ouellette Family Bursary [I3098]
Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family's broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7 to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): Dr. Malcolm Campbell

Qualification(s): Students registered in any program with demonstrated financial need.

Amount: 1 award of $2,000

Class of ’72: 25th Reunion Bursaries [I3512]
Established by the Class of ’72: 25th Reunion Fund with the assistance of the Ontario government's OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Class of ’72: 25th Reunion with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 3 awards of $1,000

Class of ’36 Bursaries [I3501]
Established by the Class of C. '36 with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

Donor(s): Class of 1936 with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): An O.A.C. degree student enrolled in any degree program who has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

Class of O.A.C. ’33 Bursaries [I3531]
Established by the class of O.A.C. ’33 on the occasion of their 65th Anniversary, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

Donor(s): Class of 1933 (in honour of the late Prof. W.J. Squirrell) with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

Class of O.A.C. ’36 Bursaries [I3501]
Established by the Class of O.A.C. ’36 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

Donor(s): Class of 1936 with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): An O.A.C. degree student enrolled in any degree program who has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

David Clark Bursary [I3574]
Preference will be given to a student whose primary medium is painting. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form and, if applicable, include a letter indicating primary medium is painting. ACCESS AWARD

Donor(s): Margaret Clark with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students registered in the Bachelor of Arts program with a major in Studio Art with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $3,000

David Havoic Bursary [I3087]
Established by the Havoic family, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to the student with the greatest financial need. Apply by October 7 to Student Financial Services with a Financial Need Assessment Form and attach a letter from Student Accessibility Services confirming registration and physical disability.

Donor(s): Debby and David Havoic

Qualification(s): Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.

Amount: 1 award of $1,000

David R. Leach Memorial Bursary [I3534]
Provided in memory of David R. Leach by his family, with the assistance of the Ontario government's OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. '73 and graduated with a B.Sc. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7. ACCESS AWARD

Donor(s): Mrs Deborah Leach-Sartor with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students who are physically disabled as determined by the Student Accessibility Services with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $1,000

Denis and Patricia Yates Bursary [I3097]
Established by Charlotte Yates in memory of her parents who were strong advocates for the value of education in society. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): Dr. Malcolm Campbell

Qualification(s): Students registered in any program with demonstrated financial need.

Amount: 1 award of $2,000
Dr. Gordon Macleod Memorial Bursary [13093]
Established in memory of Dr. Gordon Macleod in dedication to his interest in the dairy industry. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter reflecting on your interest in dairy related studies by October 7. Please be sure to include your name, student ID number, your program of study and the award you are applying to on your letter and application. Please email your application to awards@uoguelph.ca and include the award name and ID number in the subject line.

Donor(s):
Mrs. Gordon Macleod

Qualification(s):
Students registered in any degree program offered by OAC, who have financial need and who can demonstrate an interest in dairy related studies.

Amount:
1 award of $3,000

Dr. J. L. Tennant Bursaries [13064]
Established by the estate of Dr. J. L. Tennant, O.A.C. B.S.A 1913. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s):
The Estate of Dr. J. L. Tennant

Qualification(s):
Students registered in BSAG or the Agricultural Economics major offered by the Department of FARE who have completed a minimum of 12.0 credits and have demonstrated financial need.

Amount:
Several awards of varying amounts

Elizabeth Burton Bursaries [13063]
Mrs. Elizabeth Burton, with the assistance of the Ontario government’s OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s):
Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s):
Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount:
Several awards of varying amounts

F. Elsie M. Brown and William R. Brown Bursary [13091]
Supported by a gift from the Estate of Fredelene Elsie May Brown and her predeceased husband, William Robert Brown. Apply to Student Financial Services by Oct 7 with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s):
Estate of Fredelene Elsie May Brown

Qualification(s):
Students registered in any program offered by the OAC who have completed at least 10.0 credits and demonstrate financial need.

Amount:
2 awards of $2,500

George and Margaret J. Miles Memorial Bursary [13544]
Established by the family to honour the memory of the parents, George and Margaret J. Miles, life long supporters of education. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter describing involvement in extra-curricular activities to Student Financial Services by October 7. ACCESS AWARD

Donor(s):
The Miles Family with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s):
All undergraduate arts and social science students with demonstrated financial need who are in or beyond second year and have at least a 75% cumulative average in all courses completed to date are eligible to apply. Preference will be given to students who participate and provide leadership in extra-curricular or community activities (examples include student government, charitable organization, volunteer work, Big Brothers/Sisters, contributions to school and/or community, etc.). Additionally, students must meet the program-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount:
2 awards of $2,000

Gryphon Investment Council Bursaries [13513]
Established by Gryphon Investment Counsel, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s):
Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s):
Full-time students with demonstrated financial need. Additionally, students must meet the program-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount:
2 awards of $1,500

Guelph Compassionate Health and Dental Bursary [13061]
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph’s mandatory Student Health Plan, University of Guelph’s Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment Form; (2) a letter from physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and it’s impact on the student’s studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) Insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

Donor(s):
Student Health and Dental Plan Reserve

Qualification(s):
Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student’s academic progress.

Amount:
Several awards of various amounts to a maximum of $1,500

Guelph Student Assistance ACCESS Bursaries [13556]
These bursaries have been established and approved by undergraduate students through student referendums with the aid of the Ontario government’s OTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s):
Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s):
Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the program-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount:
Several awards of varying amounts up to $1,000
<table>
<thead>
<tr>
<th>Scholarship Program</th>
<th>Qualification(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Students Assistance Program [I3056]</td>
<td>Full-time undergraduate students registered in any degree program with demonstrated financial need.</td>
<td>Several awards of varying amounts up to $1,000</td>
</tr>
<tr>
<td>Gwen Kaarr Memorial Bursary [I3010]</td>
<td>O.A.C. students with demonstrated financial need.</td>
<td>1 award of $500</td>
</tr>
<tr>
<td>Helen Mahon Memorial Bursary [I3063]</td>
<td>Students registered in any program who come from a family where one parent is deceased.</td>
<td>1 award of $500</td>
</tr>
<tr>
<td>Howard and Myrtle Rogers Bursaries [I3037]</td>
<td>Students with demonstrated financial need.</td>
<td>ACCESS AWARD</td>
</tr>
<tr>
<td>Indigenous Student Bursary [I3068]</td>
<td>Aboriginal students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP) and have demonstrated financial need.</td>
<td>several awards ranging in values from $1,000 to $3,500</td>
</tr>
<tr>
<td>International Emergency Medical Aid Assistance [I3059]</td>
<td>International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.</td>
<td>Several awards of varying amounts</td>
</tr>
<tr>
<td>Irvine and Grace Black Memorial Bursary [I3051]</td>
<td>Full-time undergraduate students registered in any degree program with demonstrated financial need.</td>
<td>1 award of $500</td>
</tr>
<tr>
<td>Ivey Cook Bursaries [I3076]</td>
<td>Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are eligible for student referendum to assist undergraduate and University of Guelph campus diploma students in financial need.</td>
<td>several awards of up to $1,000</td>
</tr>
<tr>
<td>Joan Weatherly Memorial Bursary [I3065]</td>
<td>Students registered in any degree program in the departments of Geography, Political Science, Psychology and Sociology &amp; Anthropology with demonstrated financial need.</td>
<td>1 award of $1,500</td>
</tr>
<tr>
<td>John &amp; Margaret Van Loon Family Bursary in Science [I3049]</td>
<td>Students registered in any program in the College of Biological Science or the College of Physical &amp; Engineering Science who have completed a minimum of 2.5 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td>1 award of $1,500</td>
</tr>
<tr>
<td>Joyce Barclay-Ogden Bursary [I3074]</td>
<td>Students registered in any program in the College of Social and Applied Human Sciences with demonstrated financial need.</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Madison Gough Memorial Bursary [I3103]</td>
<td>Students registered in any program who have demonstrated financial need.</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

Notes:
- The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form and attaching documentation to support the medical issue. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with their medical issue and are awarded on a first come, first served basis.
- Selection is based on financial need.
- Students are eligible for this award automatically once a N.A.F has been submitted by the deadline date.
- Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.
Marie Hardacre Bursary [I3548]
Established by Mrs. A. Marie Hardacre, MAC DHE 1930 for students in CSAHS with a preference to female students registered in the Department of Family Relations and Applied Nutrition. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.
Donor(s): Mrs. A. Marie Hardacre with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in any academic program in the College of Social and Applied Human Sciences with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 1 award of $5,000

Mary I. Whitelock Bursaries [I3524]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.
Donor(s): Estate of Mary I. Whitelock with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 13 awards of $2,000

Métis Nation of Ontario Bursary [I3092]
The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and a statement confirming Métis status and include your card number.
Donor(s): Métis Nation of Ontario
Qualification(s): Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.
Amount: 1 award of $1,000

Murray P. And Florence L. Hannah Bursaries [I3571]
Preference will be given to students from the County of Northumberland. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD
Donor(s): Estate of Florence Hannah with matching funding through the Ontario Trust for Student Support program
Qualification(s): OAC students registered in the BSc(Agr) or the BSc(Env) program who have completed a minimum of 4.0 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: several awards of varying amounts

Norma Valeriote International Student Bursaries [I3009]
Preference given to a student from a country of focus as defined by CIDA (Canadian International Development Agency). Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.
Donor(s): Mrs. Norma L. Valeriote
Qualification(s): International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.
Amount: Several of varying amounts

O.A.C. ’38 Lloyd Minshall Bursaries [I3529]
Established by O.A.C. ’38 Alumni, with the assistance of the Ontario government’s OSOTF program, to recognize the many contributions of Lloyd Minshall to his classmates and to O.A.C. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD
Donor(s): O.A.C. ’38 Alumni with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7, or 8. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: several awards of varying amounts

O.A.C. ’55 Access Bursaries [I3517]
Provided by the class of O.A.C. ’55 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD
Donor(s): O.A.C. Class ’55 with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students at any semester level in an O.A.C. degree program or students enrolled in the B.ENG. program with demonstrated financial need and a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).
Amount: several awards of varying amounts

O.A.C. ’57 Bursaries [I3518]
Provided by the Class of O.A.C. ’57 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD
Donor(s): O.A.C. ’57 and the O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: several awards of varying amounts

O.A.C. Alumni Foundation Access Bursaries [I3533]
Provided by the O.A.C. Alumni Foundation, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD
Donor(s): O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate students with demonstrated financial need.
Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: several awards of varying amounts

OAC Student Aid Bursary [I3590]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD
Donor(s): Anonymous with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any OAC Undergraduate Degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: several awards of varying amounts totalling $8,000

Ontario Co-operatives, Credit Unions, friends and associates of Prof. R. P. Forshaw have established this bursary. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7 and a letter indicating membership of co-op or credit unions.
Donor(s): The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw
Qualification(s): Undergraduate students who have financial need. Preference may be given to candidates who have been or are members of a co-operative or credit union.
Amount: 1 award of $400

Ontario First Generation Bursary [I3062]
The Ministry of Advanced Education & Skills Development (MAESD) established the First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.
Donor(s): Ministry of Advanced Education & Skills Development (MAESD)
Qualification(s): Students registered in any program who are first generation students, Ontario residents (as defined by OSAP) and who have demonstrated financial need.
Amount: several awards ranging in values from $1,000 to $3,500
### Ontario Grape Growers Bursary [I3033]
Offered by the Ontario Grape Growers Action Committee. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.  
**Donor(s):** The Ontario Grape Growers Action Committee  
**Qualification(s):** Students with good academic standing in semesters 3 to 6 of a degree program or semesters 3 to 4 of a diploma program administered by O.A.C., and demonstrated need of financial assistance.  
**Amount:** Several of various amounts

### Robert Auger Humanitarian Bursary [I3058]
Established in memory of Bob Auger, a former Associate Registrar at the University of Guelph. It is intended as an emergency fund to assist students who unexpectedly find themselves in difficult financial situation who could benefit from receiving a grocery voucher. To be considered, students must have completed a Financial Aid Assessment form and arrange an appointment with a Financial Aid Counsellor. Appointments can be made by calling 519-824-4120 extension 58715.  
**Donor(s):** Family and friends of Robert Auger  
**Qualification(s):** Students registered in any degree program with an unexpected financial emergency.  
**Amount:** Several grocery vouchers or book vouchers

### Ron Scriver Memorial Bursary [I3547]
Established in memory of Mr. Ron Scriver (1946 - 2005) C.E.P.S B.A. ’76, to honour his outstanding 32-year career with the Ontario Universities’ Application Centre and his extensive involvement with colleagues throughout the University system. Preference will be given to students registered in the Bachelor of Computing Science Program, Apply with a Financial Need Assessment Form to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.  
**Donor(s):** Family and Friends of Ron Scriver with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students registered in any program offered by C.E.P.S with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 1 award of $2,000

### Scotiabank Bursaries [I3532]
Established by Scotiabank, with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.  
**Donor(s):** Scotiabank with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 2 awards of $1,500

### Shirley Endean Bursaries [I3570]
These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.  
**Donor(s):** Estate of Shirley E. Endean & multiple donors with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** Several awards of varying amounts

### Student Financial Services Bursary [I3107]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.  
**Donor(s):** University of Guelph  
**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.  
**Amount:** Several awards up to a maximum of $6,000

### T.K. Warley Bursaries [I3510]
Established by O.A.C. Alumni Association, with the assistance of the Ontario government’s OSOTF program, to recognize Professor T.K. Warley’s significant contribution to the O.A.C. Alumni Foundation and to students through teaching and promotion/development of “Experience Agriculture”. A degree student may receive this bursary twice. Apply by letter outlining extracurricular involvement and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.  
**Donor(s):** O.A.C. Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need who are in semester 5 to 8 of any degree program within O.A.C. A minimum 65% is required, as is participation in student activities, governance, and/or college affairs. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** Several awards of varying amounts

### Tony and Nan Legris Bursary [I3072]
Established by Rosemary Legris in memory of her parents, Tony and Nan Legris. Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.  
**Donor(s):** Rosemary Legris  
**Qualification(s):** Students registered in any program in the College of Social and Applied Human Sciences with demonstrated financial need.  
**Amount:** 1 award of $1,200

### Uffelmann Connor Family Bursary for Indigenous Students [I3109]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Métis or Inuit).  
**Donor(s):** Maris Uffelmann and Dean Connor  
**Qualification(s):** Students registered in any program who self-identify with First Nations (Status and non-Status), Métis or Inuit ancestry and who demonstrates financial need.  
**Amount:** 1 award of $1,000

### Uffelmann Connor Family First Generation Bursary [I3108]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as a first-generation student.  
**Donor(s):** Maris Uffelmann and Dean Connor  
**Qualification(s):** Students registered in any program who is a first-generation student (First generation students (parents did not attend post-secondary studies, full-time or part-time, in or outside Canada at any time or in any program) registered in any program with demonstrated financial need. and who demonstrates financial need.  
**Amount:** 1 award of $1,000

### University of Guelph Access Bursaries [I3522]
Provided by alumni and friends of the University, with the assistance of the Ontario government’s OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.  
**Donor(s):** Alumni and Friend of the University of Guelph with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** Several awards of $500, Several awards of $2,000
Established by the University of Guelph Alumni Association, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** University of Guelph Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,250

---

### University of Guelph International Bursary [I3048]

The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Students should apply to the International Student Advisor by Nov. 1 for the fall semester; March 1 for the winter semester, and July 2 for the summer semester with a completed International Student Financial Need Assessment Form (N.A.F.). If students have an emergency situation, please contact the International Student Advisor, in Student Life, University Centre, Level 3.

**Donor(s):** University of Guelph

**Qualification(s):** International students registered in a degree program who have completed a minimum of 4.0 credits and are registered in a minimum of 1.5 course credits.

**Amount:** Several varies

---

### University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [I3047]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph

**Qualification(s):** Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards to a maximum of $2,000

---

### University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph

**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards up to a maximum of $6,000

---

### University Student Assistance Program [I3057]

These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph

**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).

**Amount:** Several awards of various amounts to a maximum of $1,000

---

### Virginia Conner Memorial Bursary [I3110]

Apply by October 7th to the Student Financial Services with a completed Financial Need Assessment form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. Selection will be based on financial need.

**Donor(s):** Estate of Virginia Conner

**Qualification(s):** Students registered in any program offered by OAC with demonstrated financial need.

**Amount:** several awards of up to $2,000

---

### William Barlow Memorial Bursary [I3101]

This bursary was created to recognize the farming contributions and community spirit of Mr. Barlow. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** Mr. William Barlow

**Qualification(s):** Students registered in any program within the Ontario Agricultural College at the University of Guelph who is from Durham Region, Northumberland County, or County of Victoria including City of Kawartha Lakes and has demonstrated financial need.

**Amount:** 1 award of $3,000

---

### In-course Travel Grants

---

### E.E. Wolff International Scholarship [T0313]

The late Frank E. Wolff was a faculty member and a graduate of O.A.C. He was active in the O.A.C. Alumni Foundation and in the establishment of the O.A.C. Alumni Foundation. This scholarship fund was established in memory of Frank E. Wolff, Mr. A.O. Wolff and family. As a faculty member, he studied the techniques of artificial insemination of cattle in Denmark and upon his return in 1939, employed these techniques in the O.A.C. herd. Apply to the OAC Awards Office by February 1 with a letter outlining the cost of your trip for this course. Please be sure to include your name, student ID number, your program of study and the award you’re applying to on your application. Please email your application to oacaward@uoguelph.ca and include the award name and ID number in the subject line.

**Donor(s):** Mr. A.O. Wolff (Sr.)

**Qualification(s):** Students registered in any program offered by OAC with a minimum 70% cumulative average and who are registered AGR*2500 (Field course in International Agriculture with field trip to Costa Rica).

**Amount:** several awards of varying amounts

---

### O.A.C. ‘54 International Study Scholarship [T0586]

Established in memory of Beth Duncan to support students participating in an exchange program, study abroad semester, or a field trip course. Submit a letter (of not more than two pages) outlining the intended international study program, reasons for choosing the program and the anticipated benefits of participation. Letters should also include a brief summary of extracurricular and student related activities. Letters of reference will be considered. Apply to the O.A.C. Awards Office by May 15, no more than two semesters prior to the commencement of the program.

**Donor(s):** Class of O.A.C. ‘54

**Qualification(s):** Currently registered students in O.A.C. who are Canadian citizens or permanent residents with a minimum 75% cumulative program average who intend to participate in an exchange program, semester abroad, or field trip course.

**Amount:** 2 awards of $3,000
Bachelor of Arts and Science

Please refer to the General Statement on Awards for:

- Award Eligibility
- ACCESS Awards Eligibility
- Ontario Student Opportunity Trust Fund (OSOTF) Program
- How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

Entrance Scholarships

Angelo and Frank Agro Undergraduate Scholarship [E0520]
These scholarships are provided by the Agro Scholarship Fund. Apply, by April 15, to Student Financial Services (awards@uoguelph.ca), with a one to two-page, point-form listing of 4-H activities. This list should describe current or past activities within 4H and the position titles/names, if applicable. Attach a reference letter from a 4H club official. These scholarships will be awarded to the students demonstrating the most active involvement with 4H clubs. The committee will consider any appropriate elements, such as the length of membership in 4H, leadership roles (in support of 4H, creativity in 4H outreach, and coordination with other rural and academic activities). Credit will be given to those who have achieved in county, provincial and national 4H competitions. Recipients must maintain full-time studies and at least a 70% program average each year for the continuation of the award.

Donor(s): The Frank Agro Estate
Qualification(s): Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 - 4H projects.
Amount: 7 awards of $7,000 (payable over 4 years of study)

Board of Governors’ Scholarships [E0317]
This scholarship is considered one of the University of Guelph's most prestigious entrance scholarships with only 25 awards being awarded each year. Recipients of this scholarship are entering their program with one of the highest admission averages of that cohort. The scholarship will be renewed each year provided recipients remain registered in full-time studies and achieve a minimum 80.0% average in their previous academic year of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80.0% or better average in the previous academic year of full-time study. Payments lost cannot be added to the end of the award period. This award cannot be held with the President’s, Lincoln Alexander Chancellor’s or Chancellor’s Scholarships. Application is not required.

Donor(s): Board of Governors
Qualification(s): Academically outstanding entering students with the highest admission averages of the entering cohort.
Amount: 25 awards of $20,000 (payable over 4 years of study)

Chancellor’s Scholarships [E0688]
This scholarship was established in 2009 in honour of current and past University of Guelph Chancellor’s and is considered one of the most prestigious entrance awards offered by the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the President’s Scholarships, the Lincoln Alexander Chancellor’s Scholarships, or the Board of Governors’ Scholarships.

Donor(s): University of Guelph
Qualification(s): Students entering a degree program with a minimum 90% admission average who have taken leadership roles in activities that demonstrate an interest in international relations and development, or leadership roles in activities relating to arts and culture and demonstrate the potential to become a leader in society.
Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

Ed Carter/University of Guelph Faculty Association Scholarship [E0292]
Award is payable at $750 per annum in the student’s 1st, 3rd, and 5th semester levels, provided a cumulative average of at least a 70% is maintained. To receive the final payment, the recipient would normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.

Donor(s): University of Guelph Faculty Association
Qualification(s): Students entering any undergraduate degree program at the University of Guelph from Wellington county.
Amount: 1 award of $2,250 ($750 in the 1st, 3rd, and 5th semesters)

Ernie Kendall Science Entrance Scholarship [E0668]
Established by Ernest Kendall, O.A.C. B.S.A. 1932 and awarded to the student entering a science program with the highest admission average. Preference will be given to students that graduated from Elmira District School. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor’s Scholarships or the Board of Governors’ Scholarships. Application is not required.

Donor(s): Ernest W. Kendall
Qualification(s): Students entering any sciences (B.Sc., B.Sc.(Agr.), B.Sc.(Env.), B.Sc.(Tech), B.A.Sc., B.A.S., B.B.R.M., B.Eng.) degree program with a minimum 80.0% admission average.
Amount: 1 award of $2,000

Gordon W. Innes Scholarship [E0140]
Application is not required.

Donor(s): Gordon W. Sparky Innes Scholarship Fund Committee of the Woodstock Agricultural Society
Qualification(s): Student entering any degree program from Oxford County with the highest admission average.
Amount: 1 award of $1,000

Hardy International Student Scholarship [E0659]
Selection is based on the assessment of the student's admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.

Donor(s): Mrs. Marion Hardy
Qualification(s): Full-time international students (defined as paying the international student tuition and fees) entering any degree program.
Amount: 1 award of $2,000

International Student Entrance Scholarships [E0408]
In support of the University's strategic direction of internationalism, entrance scholarships are available each Fall semester to the top international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all relevant documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.

Donor(s): University of Guelph
Qualification(s): Students on a “student visa” entering an undergraduate degree program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.
Amount: Several awards ranging in value from $5,500 - $8,500

J.D. MacLachlan Scholarship [E0170]
Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.

Donor(s): The J.D. MacLachlan Trust
Qualification(s): Students entering any degree program at the University of Guelph.
Amount: 1 award of $1,500

Jack and Lillian MacDonald Scholarship [E0379]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald. Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

Donor(s): Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald
Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).
Amount: 1 award of $900

John Vanderkamp Memorial Scholarship [E0321]
Established by family, friends and colleagues of John Vanderkamp, former Chair of the Department of Economics, respected Dean of the College of Social Science (1981-1991) and an enthusiastic promoter of liberal education as encompassed in the Arts & Science Program. Apply to Student Financial Services (awards@uoguelph.ca) by April 15th with a letter describing involvement in extra-curricular activities and two reference letters from counsellors, teachers or mentors.

Donor(s): Established by the family, friends and colleagues of John Vanderkamp
Qualification(s): Academically outstanding students entering the B.A.S. program with significant involvement in extra-curricular activities.
Amount: 1 award of $1,000
### Lincoln Alexander Chancellor's Scholarships [E0689]

Established in 2001 in honour of Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This award cannot be held with the President's Scholarships, the Chancellors' Scholarships or the Board of Governors' Scholarships.

**Donor(s):** Many Donors  
**Qualification(s):** Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.

**Amount:** 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

### McArthur-Humphries Scholarship [E0183]

An equal number of awards are available to students from each county. In the case of insufficient eligible applicants from one county, the awards will be given to eligible applicants from the other county. These scholarships are awarded to students with the highest admission averages. Application is not required.

**Donor(s):** Wilhelmina McArthur-Humphries Trust Fund  
**Qualification(s):** Students entering any degree program with a minimum 75% admission average from Lanark and Wellington Counties.

**Amount:** 8 awards of $1,000

### President's Scholarship [E0238]

Established in 1987 in honour of their donors or distinguished members of the University and are considered one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the Chancellors' Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Board of Governors’ Scholarships.

**Donor(s):**  
**Qualification(s):** Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and/or communities.

**Amount:** 8 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)
IX. Scholarships and Other Awards, Bachelor of Arts and Science

Project Hero Scholarship [E0979]
The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permant residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursary) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

Donor(s): University of Guelph
Qualification(s): Canadian citizens/permant residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.
Amount: Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

Ted Morwick Scholarship [E0796]
Established by Ted Morwick, honorary alumni. The student with the highest admission average will be selected. This award is conditional on maintaining a 80% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify. (i.e. the student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year.) If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with the Chancellors', President’s or Board of Governors’ Scholarships. No application is necessary.

Donor(s): Mr. Edward (Ted) Morwick
Qualification(s): Students entering any degree program in the College of Arts.
Amount: 4 award of $8,000 (payable over four years.)

University of Guelph Entrance Scholarships [E0291]
The value of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student's financial account in two equal payments in the fall and winter semesters. Application is not required.

Donor(s): University of Guelph
Qualification(s): Students entering their first year of post-secondary studies for the first time with a minimum 85.0% admission average.
Amount: Several awards of $2,000. Several awards of $3,000

W. Penri Morris Memorial Scholarship [E0430]
Established by the family in memory of Penri Morris, who was killed World War II action in 1944 at the age of 21. Penri grew up on the family fruit farm near Forest, Ontario. After graduating from high school, he joined the Royal Canadian Air Force and was attached to the Royal Air Force Bomber Command as a navigator at the time of this death. Awarded to the student with the highest cumulative academic performance above 75% in all courses of the last year of high school study (full-time or equivalent study). Application is not required.

Donor(s): Prof. Rosalina Morris
Qualification(s): Students entering first year of any undergraduate program from North Lambton Secondary School in Forest, Ontario, in their absence, from Lambton County, and their absence, from Ontario.
Amount: 1 award of $1,000

Walter and Halina Slabikowski Scholarship [E0766]
This scholarship was established in memory of Walter and Halina Slabikowski who sent their first generation Canadian born children to university to enrich their lives and provide them with greater opportunities. The award will be given to the student with the highest admission average. The residence deposit must be received by published deadline date. Submit by email to awards@uoguelph.ca your full name, student ID number and a statement attesting to your parents’ place of birth and non participation in post secondary education by April 15th.

Donor(s): Irene Thompson and Slabikowski Family
Qualification(s): Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary studies.
Amount: 1 award of $1,000

Waterloo-Wellington Science & Engineering Fair (WWSEF) Scholarship [E0619]
Established to recognize excellence of the project submissions and encourage students to pursue university studies at the University of Guelph.

Donor(s): University of Guelph
Qualification(s): Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.
Amount: various awards of $1,000

Entrance Scholarships with Financial Need

Bill Klop Memorial Scholarship [E0150]
Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by April 15. Students should complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

Donor(s): Ross and Mary Lou Klop
Qualification(s): Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.
Amount: 1 award of $500

Devine Family Scholarships [E4542]
Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of Governors member, with the assistance of the Ontario government's OTSS program. These scholarships will be given out once every four years, unless the incumbent fails to qualify. The scholarship is renewable in years two, three and four with continued demonstrated financial need and full-time registration; students are required to register for no less than 2.0 credits each semester. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the "Devine Family Scholarship Application". Deadline to submit the complete application (both parts, the E.N.A.F. and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Chancellors’ Scholarships, but can be held with all other entrance awards. ACCESS AWARD.

Donor(s): Mr. Peter J. Devine with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students who are Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person entering any University of Guelph undergraduate degree program with a minimum 85% admission average. Preference will be given to students who are Black Canadians. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: up to 2 awards of $50,000 each (payable over 4 years of study)
Interhall Council Entrance Scholarship [E0636]
Established by the Interhall Council, the residence student government that programs, advocates and represents residence students to administration and Student Housing Services (www.interhall.ca), to ensure that the residence experience remains accessible to students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15.

Donor(s): Interhall Council

Qualification(s): Students entering a full-time undergraduate degree program with a minimum 85.0% admission average, residing in residence during first year on the Guelph campus with demonstrated financial need and demonstrated strong leadership ability.

Amount: 5 awards of $1,000

Kenneth O. Hammill-Blount Canada Scholarship [E4356]
Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government's OSOTF program. Selection will be based on greatest financial need from the President’s, Lincoln Alexander Chancellor's or Chancellors' Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President’s, Lincoln Alexander Chancellor's or Chancellors' Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. ACCESS AWARD.

Donor(s): The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Entering students who have applied for the President’s, Lincoln Alexander Chancellor's or Chancellors' Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $9,600 (payable in 8 payments of $1,200)

L. Norman Gibbins Microbiology Scholarship [E4392]
Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government’s OTSS program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD.

Donor(s): Family, friends and colleagues of Norman Gibbins with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering the Microbiology major in the B.Sc. program with a minimum 80% admission average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $2,500

P.A.J. Clarke Family Scholarship [E0351]
Paul and Aileen Clarke and their family established the endowment for this entrance scholarship in honour of Paul’s father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining extracurricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not a requirement. This award is not tenable with the President’s Scholarships or Lincoln Alexander Chancellor's Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

Donor(s): Paul and Aileen Clarke

Qualification(s): Students with a minimum 80% average with a record of leadership and community participation. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm.

Amount: 1 award of $12,000 (payable over 4 years)

Rol-Land Farms Scholarships [E4519]
Established by Rol-Land Farms, with the assistance of the Ontario government’s OSOTF program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): Rol-Land Farms with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students entering a degree program with demonstrated financial need and a minimum 80% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 13 awards of $2,000

Entrance Bursaries

Elizabeth Maud Hunter (Shier) Bursary [E3575]
This award was created to assist first year students in obtaining a post secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing a similar situation. Preference given to a student from the County of Brock. Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F.) for Entrance Awards. ACCESS AWARD

Donor(s): The Estate of the Late William Henry "Harry" Hunter with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering any degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 3 awards of up to $4,500

First Year Student Residence Bursary [E3066]
These 5 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the on-line Financial Need Assessment Form for Entrance Awards by April 15.

Donor(s): Student Housing Services

Qualification(s): Students entering any degree program with demonstrated financial need.

Amount: 5 awards of $500

Harvey Graham Bursary [E3030]
Provided by Harvey Graham (O.A.C. ’39). Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a working farm and complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

Donor(s): Harvey Graham, O.A.C. ’39

Qualification(s): Students entering any degree program who come from a working farm and who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.

Amount: 1 award of $1,500

International Student Entrance Bursaries [E3043]
In support of the University’s strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students entering an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar’s Entrance Award Application to Student Financial Services.

Donor(s): University of Guelph

Qualification(s): Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.

Amount: Several awards ranging in value from $1,000 to $3,000
Students registered in any degree program at the University of Guelph

Full-time student who has completed a minimum of 7.5 credits, but do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Bursary, but can be held with all other entrance awards.

**Donor(s):** University of Guelph  
**Qualification(s):** Students entering any degree program with a minimum registration of 1.5 credits and demonstrated financial need.  
**Amount:** 500 awards of $4,000

**Robert Arthur Stewart Bursaries [E3272]**

Established in memory of Mrs. Elsa H. Stewart of Pakenham, Ontario. Mr. Stewart graduated from the Ontario Agricultural College in 1933 and Mrs. Stewart from Macdonald Institute in 1932. Applicants for these bursaries should have a good academic record and an active interest in community affairs. A letter from the student and a recommendation from the County agricultural representative or the secondary school principal should be sent to Student Financial Services by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

**Donor(s):** The Estate of Mrs. H. Stewart  
**Qualification(s):** Students from the Ontario Counties of Lanark and Renfrew, and the Regional Municipality of Ottawa-Carleton, entering the 1st semester of a degree program at the University of Guelph.  
**Amount:** 14 awards of $1,000

**Steven Jones Memorial Bursaries [E3077]**

Established by Mr. and Mrs. Jones in memory of their late son, Steven Jones (B.Comm. '97). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. Selection will be made on demonstrated financial need.

**Donor(s):** Mr. Harry Jones  
**Qualification(s):** Students entering any degree program with demonstrated financial need.  
**Amount:** several awards of $2,000

**University of Guelph Accessibility Bursaries [E3038]**

Established by the University of Guelph to support students with substantial demonstrated financial need. In addition, students will be automatically approved for to participate in the work-study program conditional on the student securing a work-study approved position on campus. Participating in the work-study program is not required to hold this bursary. Payments of this award and the eligibility to participate in the work-study program conditional on the student receiving funding through their provincial/territorial and/or federal student loan assistance program and registration in a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Bursary, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph  
**Qualification(s):** Students entering any degree program with demonstrated financial need and a minimum registration of 1.5 credits.  
**Amount:** 200 awards of $14,000 (payable over 4 years) plus Work-study approval

**In-course Scholarships**

**Aboriginal Student Engagement Scholarship [10922]**

Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA's commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status), Métis or Inuit and outline volunteer/leadership experience within the Aboriginal community. The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but not be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

**Donor(s):** Aboriginal Student Association  
**Qualification(s):** Students registered in any program who self-identify as First Nation (status and non-status), Métis or Inuit, who are engaged in the Aboriginal community either in their home community or at the University of Guelph.  
**Amount:** 1 award of $1,000

**Alumni House Call Centre Scholarship [11020]**

Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15th with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

**Donor(s):** Former Employees of the Alumni House Call Centre  
**Qualification(s):** Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.  
**Amount:** 1 award of $1,000

**Bill Taylor Memorial Scholarship [10280]**

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.

**Donor(s):** AMF Canada Ltd.  
**Qualification(s):** Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or intercollegiate athletics.  
**Amount:** 1 award of $900

**Braithwaite Business Scholarships [10827]**

Named in honour of Professor Bill Braithwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15th with a resume and 500-word statement describing why business courses, in addition to their major, will benefit their future career. Shortlisted applicants may be invited for an interview with the LANG Awards Committee. Selection is based on the student who best describes why taking business courses, in addition to their major, will benefit their future career. Students may hold this award only once.

**Donor(s):** Anonymous  
**Qualification(s):** Students registered in any degree program, with the exception of B.Comm., who have successfully completed 1.0 credits towards the Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150 Introduction to Canadian Business or students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) who have completed 1.0 credits towards the minor.  
**Amount:** 10 5000 (payable over 2 semesters)
**CBSAA Student Scholarship [I0885]**

Established to recognize academic excellence and extracurricular involvement. Selection will be based on extracurricular involvement and demonstrated strong leadership at the University of Guelph, with a preference for students who are involved in college clubs and activities. This scholarship is not tenable with the CBS Student Council Extracurricular Achievement Scholarship. Apply to CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) including a one page letter of application describing extracurricular involvement on campus by May 15.

**Donor(s):** CBS Alumni Association (CBSAA)  
**Qualification(s):** Students registered in any major offered by CBS who have completed between 4.0 and 10.0 credits with a minimum 80% cumulative average.

**Amount:** 1 award of $1,000

---

**CFRU Volunteer Scholarship [I0215]**

The award is presented to the student who has made the most significant contribution to the operation and goals of CFRU. Apply to Student Financial Services by May 15 with a letter describing the contributions made as a volunteer with CFRU and how those contributions have supported the operation and furthered the goals of CFRU.

**Donor(s):** CFRU Alumni  
**Qualification(s):** Students registered in any program with a minimum cumulative average of 70% who have volunteered at CFRU for at least one year.

**Amount:** 1 award of $1,000

---

**Christina Victoria Kenny Memorial Scholarship [I1018]**

The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.

**Donor(s):** Family and Friends of Vikki Kenny  
**Qualification(s):** Students registered in any degree program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.

**Amount:** 1 award of $1,000

---

**Class of 1970 Scholarship [I0424]**

Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall and the candidate is announced each October. Application is not required.

**Donor(s):** Class 1970: 25th Reunion Gift  
**Qualification(s):** Outstanding student in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Deans’ Honours List.

**Amount:** 1 award of $1,400

---

**Collins Barrow Scholarship [I0040]**

Offered by Collins Barrow, a national firm of Chartered Professional Accountants. Selection will be based on the student who has achieved the highest grade in the course ACCT*3330, Intermediate Financial Accounting, in the past academic year. In the event of a tie, the award will go to the student with the highest cumulative average. Application is not required.

**Donor(s):** Collins Barrow - Wellington Dufferin District  
**Qualification(s):** Students who have successfully completed the course ACCT*3330, Intermediate Accounting.

**Amount:** 1 award of $1,000

---

**CSAHS Alumni Association CJPP Scholarship [I0974]**

This award is for students who are considering careers in the criminal justice field and have demonstrated commitment to public/community service through volunteer involvement. Preference will be given to students who have volunteered in areas related to the criminal justice field. In the event of a tie, the award will be given to the student with the highest cumulative average. Apply to the CSAHS Awards Committee by May 15 with an application letter outlining your volunteer experiences in public/community service with specific reference to volunteer activities related to the criminal justice field (maximum 500 words).

**Donor(s):** CSAHS Alumni Association  
**Qualification(s):** Students enrolled in a specialization of the Criminal Justice and Public Policy (CJPP) program with a minimum of 8.0 credits and a maximum of 17.0 credits.

**Amount:** 1 award of $1,000

---

**CBS Student Council Academic Achievement Scholarship [I0744]**

The CBS Student Council provides this scholarship to recognize and further encourage the academic and extracurricular achievements of CBS students. Selection will be based on academic achievement, extracurricular activities and personal essay. Apply to the CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) by May 15 with a completed application form listing academic awards, scholarships, research experience, publications and extra-curricular activities along with a 500 word personal essay outlining how the academic achievements and extra-curricular activities contribute to academic and personal goals. Application is not required.

**Donor(s):** CBS Student Council  
**Qualification(s):** Full time students registered in a major offered by the College of Biological Science who have completed at least 10.0 credits with a minimum cumulative average of 85%.

**Amount:** 1 award of $2,500

---

**CBS Student Council Extracurricular Achievement Scholarship [I0745]**

The CBS Student Council provides this scholarship to recognize and further encourage the academic and extracurricular achievements of CBS students. Selection will be based on breadth of extra-curricular activities, academic achievement and personal essay. Apply to the CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) by May 15 with a completed application form listing extra-curricular activities, academic awards, scholarships, research experience and publications along with a 500 word personal essay outlining how the extra-curricular activities and academic achievements contribute to academic and personal goals. Award may be held only once.

**Donor(s):** CBS Student Council  
**Qualification(s):** Full time students registered in a major offered by the College of Biological Science who have completed at least 10.0 credits with a minimum cumulative average of 80%.

**Amount:** 1 award of $2,500

---

**Bridge Builder Scholarship [I1050]**

The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Apply to Student Financial Services by May 15th with a one page letter outlining the volunteer activities that lead to social connections, breaking down barriers, and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people through one or more of the following: Civic engagement by facilitating community engagement, social integration and volunteerism to promote inclusion for immigrant and ethno-cultural communities; Social connections by promoting social connections and employment networking, including programs that reduce barriers and increase support for vulnerable groups; Education and empowerment by promoting intercultural understanding and break down barriers to participation in community life and decision-making. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.

**Donor(s):** Muslim Society of Guelph  
**Qualification(s):** Students registered in any program who, through volunteer activities in the local community, have demonstrated a passion and commitment for building bridges in one or more of the following ways: facilitating social connections; breaking down barriers; and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people.

**Amount:** 1 award of $1,000

---

**Bruce Holub Prize [C0973]**

Created in honour of University Professor Emeritus, Dr. Bruce Holub. Students registered in the Nutrition and Nutraceutical Sciences (NANS) major in the Department of Human Health and Nutritional Sciences. Selection will be based on who has achieved the highest grade across the courses listed below.

**Donor(s):** Dr. Bruce Holub  
**Qualification(s):** Students who are graduating in June, or who have graduated in the previous 2 convocations with a major in Nutrition and Nutraceutical Sciences (NANS) and who have completed HK*4360 or HK*4371/2, or HK*4510 or HK*4511/2.

**Amount:** 1 award of $1,000

---

**CASU Volunteer Scholarship [I0865]**

Selection will be based on significant contributions to college related extracurricular volunteer activities. Apply to the College of Arts Awards Committee by May 15 with a one page letter outlining extracurricular volunteer experience within the college.

**Donor(s):** College of Arts Student Union (CASU)  
**Qualification(s):** Full-time students registered in any program offered by the College of Arts who have completed a minimum of 4.0 credits and can demonstrate involvement in college related extracurricular volunteer activities.

**Amount:** 1 award of $1,000

---

**CBS Student Council Academic Achievement Scholarship [I0744]**

The CBS Student Council provides this scholarship to recognize and further encourage the academic and extracurricular achievements of CBS students. Selection will be based on academic achievement, extracurricular activities and personal essay. Apply to the CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) by May 15 with a completed application form listing academic awards, scholarships, research experience, publications and extra-curricular activities along with a 500 word personal essay outlining how the academic achievements and extra-curricular activities contribute to academic and personal goals. Award may be held only once.

**Donor(s):** CBS Student Council  
**Qualification(s):** Full time students registered in a major offered by the College of Biological Science who have completed at least 10.0 credits with a minimum cumulative average of 85%.

**Amount:** 1 award of $2,500

---

**CBS Student Council Extracurricular Achievement Scholarship [I0745]**

The CBS Student Council provides this scholarship to recognize and further encourage the academic and extracurricular achievements of CBS students. Selection will be based on breadth of extra-curricular activities, academic achievement and personal essay. Apply to the CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) by May 15 with a completed application form listing extra-curricular activities, academic awards, scholarships, research experience and publications along with a 500 word personal essay outlining how the extra-curricular activities and academic achievements contribute to academic and personal goals. Award may be held only once.

**Donor(s):** CBS Student Council  
**Qualification(s):** Full time students registered in a major offered by the College of Biological Science who have completed at least 10.0 credits with a minimum cumulative average of 80%.

**Amount:** 1 award of $2,500
David F. Boyes Apiculture Scholarship [I0031]
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application is not required.

Donor(s): The Apiculture Club
Qualification(s): Student registered in the Fall semester who achieves high academic standing in Introductory Apiculture (ENVB*2210) in the previous year, demonstrates an interest in apiculture and who has participated in extracurricular activities.

Amount: 1 award of $200

Deans’ Scholarships [I0323]
This award was established by the Board of Governors’ in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.

Donor(s): Board of Governors
Qualification(s): Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.

Amount: 150 awards of $2,000

Donna Lero Scholarship in Family Services [I0976]
Established by Donna Lero upon her retirement after 42 years as a faculty member in the department of Family Relations and Applied Nutrition. Selection will be based on the most significant impact made in support of families through volunteer activities with agencies or services that support families. Apply by May 15 to the Department of Family Relations and Applied Nutrition with a letter of application outlining the impact made in support of families, including interest in pursuing a career in family services and one letter of reference supporting the impact. Students may only hold this award once.

Donor(s): Donna Lero
Qualification(s): Students registered in any major or minor offered by the Department of Family Relations and Applied Nutrition who have an interest in pursuing a career in family services, have completed a minimum of 12.5 credits and who have volunteered with agencies or services that support families.

Amount: 1 award of $1,000

Dr. Donald Bruce & Dr. Donna Pennee Arts & Sciences Scholarship [I0931]
Awarded to the student with the highest cumulative average. No application required.

Donor(s): Dr. Donald Bruce & Dr. Donna Pennee along with support from additional donors.
Qualification(s): Students registered in the Bachelor of Arts and Sciences (BAS) Program who have completed a minimum of 8.0 credits.

Amount: 1 award of $1,000

Dr. James (Jim) Atkinson Scholarship [I1025]
This award has been created through the generous contributions of many alumni and friends to recognize Dr. James (Jim) Atkinson’s influence at Guelph. As coach for over thirty years on both the men’s and women’s teams, as well as a respected faculty in the department of Animal and Poultry Science, Jim has had an impact on and off the field. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

Donor(s): Alumni and Family of Dr. James (Jim) Atkinson
Qualification(s): One male rugby player and one female rugby player who is registered in any undergraduate program and who has achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student enrolled in the Ontario Agricultural College.

Amount: 2 awards of $1,000

George A. Gray O.A.C. ‘51 Varsity Scholarships [I0487]
Established in memory of George Gray, O.A.C. ’51, a Guelph football lineman and a great player of the game. Recipients will be selected based on demonstrated athletic and leadership qualities. Coaches will nominate students to the Athletics Awards Committee. Preference will be given to members of the varsity football team. Application is not required. Awarded in the fall semester.

Donor(s): Mrs. George A. Gray
Qualification(s): In-course student-athlete who is a current member of a varsity team and has achieved a minimum 70% average in the previous academic year.

Amount: 2 awards of $1,250

Governor General’s Medal [C0044]
Established by the Office of the Governor General of Canada. Application is not required.

Donor(s): The Chancellery
Qualification(s): Restricted to those undergraduate students in any degree program who are graduating in June, or who have graduated in the previous two convocations, with the highest cumulative average.

Amount: 2 awards of a Silver medal each

Grace Olivia Glofcheskie Memorial Scholarship [I0977]
Established in loving memory of Grace Olivia Glofcheskie (BSc ’13, MSc ’15) and supported by family, friends and peers to honour Grace’s time at U of G. Selection will be based on highest cumulative average. No application required.

Donor(s): Friends and Family of the Glofcheskies
Qualification(s): Students registered in CBS who have a minimum of 5.0 credits and who are varsity athletes. Preference will be given to students registered in Human Health & Nutritional Sciences.

Amount: 1 award of $2,000

Harry Barrett Memorial Scholarship [I1046]
This award was established through a gift from the estate of Mr. Harry Barrett, a graduate of OAC from 1949. Selection will be based on the highest cumulative average. Apply by May 15th to Student Finance with a written explanation of the planned experiential learning opportunity. If there are no applications by May 15th, the scholarship will be given to the student with the highest grade in ZOO*4920 in the previous Fall offering.

Donor(s): The Estate of Harry Barrett
Qualification(s): Students registered in any program who will be participating in field work related to bird studies. Preference will be given to students interested in research and/or study under the Bird Studies Canada program at their headquarters in Port Rowan, Ontario.

Amount: 1 award of $1,500

International Undergraduate Scholarship [I0577]
Established through a student referendum approved by the undergraduate student body, to recognize international students’ academic merit along with involvement/leadership activities during their enrollment at the University of Guelph. Apply to Student Financial Services, by May 15, with a letter indicating involvement/extracurricular activity since entry to the University. This award can only be held once by the student.

Donor(s): International Student Organization (ISO)
Qualification(s): Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.

Amount: several at awards of $3,000

J.W. Skinner Medal in Social Science [C0260]
Established in honour of the many contributions of Dr. J.W. Skinner, a former Dean of the College of Social Sciences. Application is not required.

Donor(s): Faculty, staff, alumni and students, of the former College of Social Science
Qualification(s): Presented to the C.S.A.H.S. Winegard Medal nominee.

Amount: 1 award of a Medal

Jack and Lillian MacDonald Scholarship [E0379]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnic Institute) who has the highest cumulative average at the University.

Donor(s): Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald
Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).

Amount: 1 award of $900
John Eccles Scholarship [10093]

Apply to Student Financial Services, by May 15, with a letter highlighting leadership abilities through participation on residence life. Providing a reference letter would be an asset.

Donor(s): Student Housing Services
Qualification(s): Full-time student registered in semester 2, 3, 4, 5 or 6 and living in residence in the Winter semester who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in residence related activities. Residence Life Staff and paid members of Interhall Council and Hall Councils are not eligible.

Amount: 1 award of $1,000

Kenneth W. Hammond Scholarship [10045]

Student with the highest grade in the course ENVS*2070 “Environmental Perspectives and Human Choices.” Application is not required.

Donor(s): Kenneth W. Hammond
Qualification(s): Students who have completed the course Environmental Perspectives and Human Choices ENVS*2070
Amount: 1 award of $1,000

Kevin Durie Memorial Scholarship [10653]

Established in memory of Kevin Durie, BA ’93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.

Donor(s): Christine Blake-Durie
Qualification(s): Students who are registered in any degree program on the University of Guelph campus, are a member of Residence Life staff and are academically eligible to continue as a Residence Assistant or as part of Residence Life staff.
Amount: 2 awards of $1,000

Kip Hunter Prize [10139]

For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May 1

Donor(s): Faculty, students and staff of the Philosophy Department
Qualification(s): Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.
Amount: 1 Book prize

Lambda Foundation Scholarship in LBGT Studies [10591]

This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LBGT peoples. Preference will be given to an applicant who is involved in the LBGT community as demonstrated by a record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a given student only once. Projects must have been completed or research proposals accepted within the past calendar year. Apply to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referring in involvement in the LBGT community and/or faculty support.

Donor(s): Lambda Foundation and other donors
Qualification(s): Students enrolled in a program with a thesis, a research essay, independent research project or course work programs pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.
Amount: 1 award of $1,000

Leonard Conolly Exchange Student Scholarship [10446]

Established by students, faculty, staff and friends to honour Prof. Leonard Conolly, professor of drama, Chair of the Department of Drama, 1981-88, and Associate Vice-President Academic, 1988-1992. Apply to the Centre for International Programs by April 5, for visiting during the subsequent Fall or Winter semesters. Selection, by the Centre for International Programs, will be based on assessment of (a) a one-page submission describing the significance of the student visiting Guelph to the program of study at the partner exchange university (b) two faculty references of one-page each, and (c) consistent high performance in the course work completed, as documented by a transcript of program grades to date, submitted by the home university.

Donor(s): Students, staff, faculty and friends of Dr. Leonard Conolly
Qualification(s): Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).
Amount: 1 award of $1,000

Linda S. Allen Memorial Graduation Prize [10914]

This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medallion, on the occasion of its second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant circumstances during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).

Donor(s): Brian Allen, Family, Friends and Colleagues of Linda S. Allen
Qualification(s): Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.
Amount: 1 award of $1,000

Marion McKenzie Scholarships for Outstanding Achievement in History [10470]

These prizes have been established in memory of Marion McKenzie (1905-1994), a teacher who had a love of learning and a continuing curiosity about the world both past and present. These are awarded to the top student in each of the required core courses in the History program (HIST*1050, HIST*2450) in the previous academic year. Application is not required.

Donor(s): Dr. James Snell and Mrs. Leslie Snell
Qualification(s): Students who have completed one of the following required core courses in History: HIST*1050 and HIST*2450. The recipient for HIST*1050 must have completed no more than 5.0 credits; the recipient for HIST*2450, no more than 10.0 credits and be in the specialization in History.
Amount: 2 awards of $1,000

Mckendry-Baker Memorial Scholarship [10969]

Established in memory of the late retired Guelph Deputy Chief of Police, Harold Mckendry and his late wife Marlene Mckendry for their lifetime dedication to policing, the community and their family. Through the careers of several family members, members of the Mckendry family have served their communities with more than 105 years of police service. Students will apply by May 15 with a letter outlining the impact made in support of families and/or individuals in the community including their interest in pursuing a career linked to police services and one letter of reference supporting the impact. Selection will be based on the most significant impact made in support of families and/or individuals in the community through extracurricular activities. As evidenced by a letter of application and one letter of reference supporting the impact.

Donor(s): Colleen, Rob & Emma Mckendry-Baker
Qualification(s): Students registered in Criminal Justice and Public Policy major or minor who have an interest in pursuing a career related to police services, have completed a minimum of 8.0 credits and who have participated in extracurricular activities in support of families and/or individuals within the community.
Amount: 1 award of $1,000
### IX. Scholarships and Other Awards, Bachelor of Arts and Science

#### Professional Staff Association Future Leader Scholarship [I1132]

This scholarship is provided to students whose leadership involvement makes a positive impact at the University of Guelph and/or the broader community. Apply by email to awards@uoguelph.ca by May 15 with one letter of reference and a personal statement (max. 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average will be awarded. This award may not be held more than once.

**Donor(s):** The Professional Staff Association (PSA)

**Qualification(s):** Students registered in any program who demonstrate involvement in leadership opportunities that result in positive community impact, and who are from the immediate family of full-time, part-time, contractual or retired members of the Professional/Managerial Group at the University of Guelph. Preference will be given to a student that has not received the Professional Staff Association Scholarship in the same year.

**Amount:** 1 award of $1,500

#### Nathan Max Goldman Choir Scholarships [I0774]

Established in honour of Mr. Goldman, an OAC graduate (1945 and 1947) and former President of the Philharmonia Society at the University of Guelph. The scholarships will support two students who demonstrate outstanding leadership and vision in the Symphonic Choir and/or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high vocal achievement and choral leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required. As a recommendation by Choir Director will be made to the SOFAM Awards Committee.

**Donor(s):** Mrs. Anne Goldman and the family of Nathan Max Goldman

**Qualification(s):** Students registered in any degree program who are currently a member of the University of Guelph Symphonic Choir and/or the Chamber Choir and have been a member of the University of Guelph Choirs for at least two years.

**Amount:** 2 awards of $1,000

#### Natural Resource Solutions Prize in Field Ecology [I1058]

Natural Resource Solutions Inc. established this award to acknowledge students demonstrating academic excellence in the area of field work in ecology. Selection is based on the highest grade in the course. This scholarship cannot be held at the same time as Natural Resource Solutions Scholarship in Laboratory and Field Work in Ecology I1057. Application is not required.

**Donor(s):** Natural Resource Solutions Inc.

**Qualification(s):** Students who completed Field Ecology in the previous fall semester.

**Amount:** 1 award of $1,000

#### Natural Resource Solutions Scholarship in Laboratory and Field Work in Ecology [I1057]

Natural Resource Solutions Inc. established this award to acknowledge students demonstrating academic excellence in the area of field work in ecology. Selection is based on the highest grade in the course. This scholarship cannot be held at the same time as Natural Resource Solutions Prize in Field Ecology I1058. Application is not required.

**Donor(s):** Natural Resource Solutions Inc.

**Qualification(s):** Students who completed Field Ecology in the previous fall semester.

**Amount:** 1 award of $1,000

#### Nick Westwood Memorial Scholarship in Spectroscopy [I0982]

In recognition of Professor Nick Westwood’s enduring contributions to the field of Molecular Spectroscopy, and his devotion to academic development and achievement at all levels, his family, friends and Department of Chemistry colleagues have established this award to honour his memory. Selection will be based on the highest grade in CHEM*2070 Structure and Spectroscopy. In the event of a tie, the award will go to the student with the highest cumulative average. Application not required.

**Donor(s):** Staff, faculty and friends of the Department of Chemistry

**Qualification(s):** Students registered in any degree program with a minimum 80% cumulative average who have obtained a minimum of 80% in CHEM*2070 Structure and Spectroscopy.

**Amount:** 1 award of $1,000

#### Priscilla and Stanford Reid Trust Prize [I0597]

Established in honour of the first chair of the History Department, Stanford Reid, and his wife, Priscilla Reid to acknowledge the best paper written about the history of Presbyterianism and/or the Reformed tradition. Apply, by April 1, with a copy of the paper and a covering letter including contact information to the Department of History Awards Chair.

**Donor(s):** Priscilla and Stanford Reid Trust Fund

**Qualification(s):** Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.

**Amount:** 1 award of $500

#### Project Hero Scholarship [I0979]

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent's full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent persisted during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph

**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses
### Scotiabank Scholarships in Leadership [I0834]
Apply to the Department of Management Awards Committee by May 15 with: 1) A 500 word personal statement describing the impact of their leadership practice in a non-profit setting including the benefits to the student and to the organization; 2) Reference letter(s) from the organization(s) in which the leadership practice took place. In the event of a tie, the award will go to the student with the highest cumulative average. Please submit your application by email to: dom.awards@uoguelph.

**Donor(s):** Scotiabank  
**Qualification(s):** Students who have completed the Foundations of Leadership course (HROB*210) and either completed the required 120 hours of leadership practice for the undergraduate Certificate in Leadership in a non-profit setting or are registered in the Leadership and Organizational Management major of the BComm program and have demonstrated exceptional leadership in a non-profit setting.

**Amount:** 5 awards of $1,000

### Sports Media and Sports Broadcasting Scholarships [I1035]
Apply by May 15th to Student Financial Services by submitting a one page letter outlining sports media or sports broadcasting experience in the past year. Letters can be emailed to awards@uoguelph.ca. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minoring in Media and Cinema Studies and who have the highest GPA.

**Donor(s):** Rogers Media Inc.  
**Qualification(s):** Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas. To be awarded to an undergraduate student first, then to a graduate student if no undergraduate students apply.

**Amount:** 2 awards of $2,500

### Stephanie Wilken Volunteer Scholarship [I0449]
Established by the Wilken family in memory of Stephanie Wilken, BA 1995. Apply to Student Financial Services with letter indicating the kind and extent of volunteer activities at the Wellness Centre by October 1. Selection committee is the Senate Committee on Awards on the recommendation of the Student Wellness Educator at the Wellness Centre.

**Donor(s):** Bev and Darlene Wilken  
**Qualification(s):** Student registered in any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre.

**Amount:** 1 award of $1,000

### Steve Harrington Memorial Scholarship [I1122]
Established in memory of Steven Harrington, a proud alumnus and passionate educator who was dedicated to making his community a better place. Students apply to the Political Science Awards Committee by May 15th with a one-page letter outlining the impact of their leadership through positions held, extra-curricular involvement, volunteering in school and communities as both a high school and undergraduate student. Selection will be based on the greatest impact made through leadership. Not tenable with the Class of 1983 Political Science Scholarship II129 or the Dan Mathieson Scholarship II124.

**Donor(s):** Carolyn Cooper  
**Qualification(s):** Students registered in the Political Science (POLS) major or minor who have completed a minimum of 2.5 credits with demonstrated leadership as evidenced through positions held, extra-curricular involvement and volunteering in school and communities, as both a high school and undergraduate student.

**Amount:** 1 award of $1,500

### Summerlee Humanitarian Scholarships [I0964]
The **Summerlee Humanitarian Scholarships** are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues of global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a varsity athlete (varsity athletes should self-identify in their letter). While applicants who demonstrate past significant impacts in improving local communities/groups will be considered, preference will be given to applicants with strong previous proven international humanitarian efforts. Recipients must adhere to the University of Guelph’s Safe Travel Policy.

**Donor(s):** The Angel Gabriel Foundation  
**Qualification(s):** Students registered in any program with no more than 17.0 credits completed who have demonstrated a commitment to humanitarian efforts including but not limited to those affecting refugees, displaced persons, and populations affected by conflict and natural disasters through volunteer positions, prior employment and/or extra-curricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.

**Amount:** 5 awards of $10,000 ($5,000 in each of the fall and winter semesters) plus an additional up to $4,000 to support travel costs

### Susan Travers Memorial Scholarship [I0975]
Established by friends, family and colleagues in Alumni Affairs and Development in Memory of Susan Travers. Susan believed in the value of education. She worked for the University of Guelph as a member of Alumni Affairs and Development and in the Department of Business. She not only encouraged her children to pursue post-secondary education, but led by example, pursuing her university degree as a mature student.

**Donor(s):** The staff in Alumni Affairs and Development and Friends  
**Qualification(s):** Students who were accepted to the University of Guelph as a “mature student” applicant and who are currently registered in any degree program.

**Amount:** 1 award of $1,000

### Thomas H. Peters Scholarship [I0233]
Application is not required.

**Donor(s):** Friends and associates of Thomas H. Peters  
**Qualification(s):** Student in any academic program of the University who has completed courses in Land Reclamation (e.g. CROP*2280, SOIL*3200), with a minimum 10.0 credits completed. Applicants must have a minimum of 70% cumulative average and have demonstrated an interest and aptitude in the area of crops and land reclamation.

**Amount:** 1 award of $500

### Toronto District Beekeeper’s Association Scholarship [I0285]
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application is not required.

**Donor(s):** Mr. Jack Robinson  
**Qualification(s):** The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.

**Amount:** 1 award of $500

### United Steelworkers Local 4120 Scholarship [I0293]
Apply to Student Financial Services by January 31 and provide the name of the USWA graduate student if no undergraduate students apply.

**Donor(s):** United Steelworkers LU4120  
**Qualification(s):** Student who is a member or former member, or who is from the immediate family of a member of United Steelworkers LU 4120, and who is entering semester 2, 3, or 4 of a degree or diploma program in the Winter semester with a minimum 70% cumulative average.

**Amount:** 1 award of $1,000
### University of Guelph Alumni Legacy Scholarship [I0735]

Funded through donations made to the University of Guelph Alumni Memorial Fund in memory of deceased alumni. The recipient will be selected based on academic achievement and volunteer contributions to the University of Guelph community. Apply to Student Financial Services by May 15 with a cover letter indicating name, degree and year of graduation of alumna/alumnus relative and a resume or summary of leadership and volunteer contributions to the University of Guelph community.

**Donor(s):** Various donors c/o University of Guelph Alumni Association Memorial Fund

**Qualification(s):** Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumna/us of the University of Guelph or its founding colleges.

**Amount:** 1 award of $1,000

### University of Guelph Retirees Association Scholarship [I0569]

Established in 2007 to acknowledge in-course student achievement. The student having the highest cumulative average will be selected and in the event of a tie, the student with the highest average in the last two semesters of full-time studies will be chosen. Apply by May 15th to Student Financial Services with a letter indicating name of and relationship to a retiree of the University of Guelph. Recipients cannot hold this scholarship and another scholarship greater than $1,500 at the same time.

**Donor(s):** University of Guelph Retirees Association (U.G.R.A.)

**Qualification(s):** Students with a minimum cumulative average of 75% registered in a degree program who are related to a retiree of the University of Guelph as child, grandchild or great grandchild who have not held the scholarship before.

**Amount:** 1 award of $1,500

### Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]

The scholarship will be awarded to the student who has demonstrated academic achievement and exemplary leadership. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca a one-page summary demonstrating leadership skills gained through participation in extracurricular activities, both within the university and the broader community. Preference will be given to students who have completed between 3 and 10 credits at the time of application for the award.

**Donor(s):** Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoeven & family

**Qualification(s):** Students registered in any program who have achieved a minimum of 80% cumulative average and participated in extra-curricular activities.

**Amount:** 1 award of $2,000

### W.C. Winegard Medal [C0311]

The W.C. Winegard Medal is the most prestigious and top convocation award presented to an undergraduate student at the University of Guelph. Named for former University President Dr. William Winegard, the medal is awarded in recognition of both academic achievement and contributions to the university and community life. One student will be nominated by each College Awards Committee. The Senate Honours and Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application is not required.

**Donor(s):** The Board of Governors of the University

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations who excels both academically and in contributions made to the university and community life.

**Amount:** 1 award of a Gold medal

### W.N. Vaughan Medal [C0299]

A medal may be given annually to a student senator who has high academic standing and who has made a substantial contribution to student life and to the university, particularly through involvement in and commitment to Senate activities. Prospective candidates will be nominated by senators and the medal winner will be chosen by a committee selected by the Senate Bylaws and Membership Committee. The medal will be awarded at June convocation. No application is necessary.

**Donor(s):** Friends of Walter N. Vaughan

**Qualification(s):** Student senator who has high academic standing and who has made a substantial contribution to student life and to the University, particularly through involvement in and commitment to Senate activities.

**Amount:** 1 award of a Medal

### William Furlong Scholarship in Economics [I0886]

The Department of Economics & Finance offers this scholarship in honour of Professor William Furlong, a long-term member of the Department of Economics & Finance and a leader in the scholarship of teaching principles of microeconomics, to the student with the highest average in Introductory Microeconomics (ECON*1050) in the fall semester. Application is not required.

**Donor(s):** Colleagues & Friends of Dr. William Furlong

**Qualification(s):** Students registered in any program offered by the Gordon S. Lang School of Business and Economics who complete the course Introductory Microeconomics (ECON*1050) in the Fall semester.

**Amount:** 1 award of $900

### In-course Scholarships with Financial Need

#### Bernice and Bruce Sells Leadership Scholarship [I1101]

Created by Dr. Bruce Sells, the dean of the College of Biological Science, 1983-1995, and his wife Mrs. Bernice Sells. Selection of the student recipient will be based on demonstrated initiative and innovation through significant involvement in extracurricular and leadership activities. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and a letter describing extra-curricular and leadership activities.

**Donor(s):** Dr. Bruce Sells and Mrs. Bernice Sells

**Qualification(s):** Students registered in any program offered by the College of Biological Science with a minimum cumulative average of 85% who have completed a minimum of 12.0 credits, have demonstrated financial need and who also demonstrate initiative and innovation through significant involvement in extra-curricular and leadership activities.

**Amount:** 1 award of $1,000

#### Brian Kenneth Howard Memorial Scholarship [I4548]

Established by Kenneth and Irene Howard in memory of their son, Brian Kenneth Howard. Awarded to a student assessed as having financial need with a preference given to students from York, Durham or Simcoe counties. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Kenneth and Irene Howard

**Qualification(s):** Student registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $3,000

#### CIBC Health and Science Scholarships [I4402]

Applications will be accepted beginning Fall 2020. Preference will be given in the following order: i) students who completed a summer Student Research Assistantship (S.R.A) under a University of Guelph faculty member; and ii) students who participated in cancer research-related activities. Apply by October 7 to Student Financial Services by submitting a completed Financial Need Assessment Form and include a letter outlining extracurricular activities in human health and, if applicable, highlighting cancer-related activities. ACCESS AWARD

**Donor(s):** CIBC with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Students registered in any major offered by the College of Biological Science who have completed at least 5.0 credits with a minimum cumulative average of 75% and who have participated in extracurricular activities related to human health. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 2 awards of $5,000
City of Guelph 175th Anniversary Scholarship [I0515]
Funded by a leadership gift from the City of Guelph and donations from business and community leaders, this scholarship was established in 2002. Apply to Student Financial Services by October 7 with a letter describing volunteer activities, one reference letter from an individual familiar with the volunteer and/or community service contributions, and a completed Financial Need Assessment Form (N.A.F.). Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need. This award may be held only once.

Donor(s): The Guelph Community Foundation
Qualification(s): Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70.0% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.

Amount: 1 award of $2,000

Eleanor Morgan & Bill Archibald Scholarships [I4540]
The family of Eleanor and Bill Archibald, with the assistance of the Ontario government’s OSOTF program, provide this scholarship in memory of their parents. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining community involvement to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): The Family of Eleanor & Bill Archibald with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any program with a minimum of 5.0 credits who have completed a minimum 70% cumulative average, has demonstrated community involvement, and financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (See General Statements on Awards).

Amount: 2 awards of $500

Elsie M. Piovesan Memorial Scholarship [I0912]
Established to honour Elsie M. Piovesan, beloved Aunt, friend and life-long music lover. The two recipients will be the students with demonstrated financial need and highest cumulative averages. This scholarship is not tenable with the Beatrice Youngman Prize in Music. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): Mr. Paul Case
Qualification(s): Students registered in a major or minor in Music with demonstrated financial need.

Amount: 2 awards of $2,000

Erin Demers Memorial Scholarship [I0406]
The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.), along with one supporting reference letter from a Residence Assistant, Residence Manager, or Residence Officer.

Donor(s): Family and friends of Erin Katrina Demers
Qualification(s): Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

Amount: 1 award of $1,800

Euclid-Hitachi Scholarships [I4517]
Established by Euclid-Hitachi Canada Ltd., with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD

Donor(s): Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,500

Graham Family Incentive Scholarship [I4506]
Provided by Harvey Graham (O.A.C. ’39) with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD

Donor(s): Harvey Graham O.A.C. ’39 with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students entering the fourth year of a four year degree program, maintaining at least a 70% program average and demonstrating financial need, who have previously received the Harvey Graham Bursary. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $6,000

Guelph Campus Co-operative Centennial Scholarship [I0867]
In recognition of the Guelph Campus Co-operative’s centennial anniversary and the students who founded it, this scholarship is awarded to a student who has demonstrated financial need. Preference will be given to students who are members of the Guelph Campus Co-operative. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form and a photocopy of your valid co-operative membership card.

Donor(s): Guelph Campus Co-operative
Qualification(s): Students registered in any program at the University of Guelph who have completed a minimum of 5.0 credits with a minimum cumulative average of 75% and have demonstrated financial need.

Amount: 1 award of $1,000

Hung-So Chow Yuen Leadership Scholarship [I4400]
This award was established in memory of Hung-So Chow Yuen, Stacey Yuen’s (CBS BSc Hon 2003 Alumni) late Grandmother. Apply to Student Financial Services by October 7 with a University of Guelph Financial Need Assessment Form along with a statement of up to 500 words outlining leadership and involvement in volunteer activities. Selection will be based on demonstrated exemplary leadership through involvement with on campus or off campus volunteer activities (student associations/charitable or non-profit organizations) as described in a statement. ACCESS AWARD.

Donor(s): John and Agnes Yuen with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in a program offered by the College of Biological Science who have completed between 5.0 and 17.5 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $2,500

Residence Life Staff Scholarship [I0697]
Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date.

Donor(s): Student Housing Services
Qualification(s): Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program.

Amount: 2 awards of $500

Returning Student Residence Scholarship [I0696]
Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award.

Donor(s): Student Housing Services
Qualification(s): Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average.

Amount: 3 awards of $500
### IX. Scholarships and Other Awards, Bachelor of Arts and Science

<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tara Lynn Giuliani Memorial Scholarship [I0375]</strong></td>
<td>Awarded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment form. Selection is based on financial need.</td>
<td>$1,000</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Tara Lynn Giuliani Foundation at the Hamilton Community Foundation</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services, and have demonstrated financial need. Preference given to students with a visual impairment.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000</td>
<td></td>
</tr>
<tr>
<td><strong>William &amp; Nona Heaslip Scholarship [I0589]</strong></td>
<td>Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7th. Recipients of this award can receive this award renewed for up to 3 years provided they continue to demonstrate financial need, and maintain a minimum 70% cumulative average of full-time (minimum 80% of a full course load) study. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>The William and Nona Heaslip Foundation</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students that have completed 4.0 credits but no more than 6.0 credits in any degree program; are a Canadian citizen/permanent resident; have a minimum 70% cumulative average; and demonstrate financial need.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>2 awards of $15,000</td>
<td></td>
</tr>
<tr>
<td><strong>Brinson Partners Inc. Bursaries [I3526]</strong></td>
<td>Provided in memory of Dr. Malcolm Campbell, who is passionate about supporting students with financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter from SAS confirming physical disability by October 7. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Dr. Malcolm Campbell</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $1,000</td>
<td></td>
</tr>
<tr>
<td><strong>Burnbrae Farms Bursaries [I3525]</strong></td>
<td>Provided by the Burnbrae Farms with the assistance of the Ontario government's OSOTF program to support students who wish to study full-time. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award. (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>2 awards of $1,000</td>
<td></td>
</tr>
<tr>
<td><strong>Campbell-Ouellette Family Bursary [I3098]</strong></td>
<td>Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family's broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Dr. Malcolm Campbell</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students registered in any program with demonstrated financial need.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $2,000</td>
<td></td>
</tr>
</tbody>
</table>
Guelph Compassionate Health and Dental Bursary [I3061]

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph’s mandatory Student Health Plan, University of Guelph’s Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment form; (2) a letter from physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and it’s impact on the student’s studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) Insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

Donor(s): Student Health and Dental Plan Reserve
Qualification(s): Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student’s academic progress.

Amount: Several awards of various amounts to a maximum of $1,500

Guelph Student Assistance ACCESS Bursaries [I3556]

These bursaries have been established and approved by undergraduate students through student referendum with the aid of the Ontario government’s OTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: Several awards of varying amounts up to $1,000

Guelph Student Assistance Program [I3056]

These bursaries have been established and approved by undergraduate students through student referendum to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need.

Amount: Several awards of varying amounts up to $1,000

Helen Mahon Memorial Bursary [I3063]

Established in memory of Helen Mahon, a longtime employee of the University of Guelph and who, following the death of her husband, raised three young children alone, all of whom graduated from university. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a statement that indicates you meet the criteria of this bursary. Awarded in the winter.

Donor(s): Family and Friends of Helen Mahon
Qualification(s): Students registered in any program who come from a family where one parent is deceased.

Amount: 1 award of $500

Howard and Myrtle Rogers Bursaries [I3537]

Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Qualification(s): Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate on-going financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 10 up to $2,000

Indigenous Student Bursary [I3068]

In 2009, the Ministry of Advanced Education and Skills Development established the this Bursary as part of their new Aboriginal post-secondary education funding initiative. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with financing their education. Apply to Student Financial Services by October 7th with a Financial Need Assessment Form and complete the Indigenous Student Bursary Application. Selection is based on financial need.

Donor(s): Ministry of Advanced Education and Skills Development (MAESD)
Qualification(s): Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP), and have demonstrated financial need.

Amount: several awards ranging in values from $1,000 to $3,500

International Emergency Medical Aid Assistance [I3059]

The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an on-going basis.

Donor(s): University of Guelph
Qualification(s): International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.

Amount: Several awards of varying amounts

Irvine and Grace Black Memorial Bursary [I3051]

Established in memory of Irvine and Grace Black, by friends and family to recognize their many contributions to young people. Irvine, a well-known sheep breeder, was a judge at College Royal and the Royal Winter Fair for over fifty years, and Grace was active in the Women’s Institute and the Fergus Fall Fair. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining involvement in the 4-H Club and/or a Women’s Institute by October 7.

Donor(s): Family and friends of Irvine and Grace Black
Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to applicants who are, or have been, active in the 4-H Club and/or a Women’s Institute.

Amount: 1 award of $500

Ivey Cook Bursaries [I3076]

Apply to SAS using the “New Student Intake Form” and a letter explaining your situation and attach documentation showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first come first served basis, based on the validity and need for an assessment.

Donor(s): Suzanne Ivey Cook
Qualification(s): Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment.

Amount: several awards of up to $1,000
Madison Gough Memorial Bursary [I3103]
Established by the friends and family of Madison Gough, a gentle, kind spirit who was inspired by nature, animals, or music and passionate about acceptance of difference. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Bob Gough and Laura Ladouceur
Qualification(s): Students registered in any program who have demonstrated financial need.
Amount: 1 award of $1,000

Mary L. Whitelock Bursaries [I3524]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Estate of Mary L. Whitelock with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 13 awards of $2,000

Métis Nation of Ontario Bursary [I3092]
The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and a statement confirming Métis status and include your card number.

Donor(s): Métis Nation of Ontario
Qualification(s): Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.
Amount: 1 award of $1,000

Norma Valeriote International Student Bursaries [I3009]
Preference given to a student from a country of focus as defined by CIDA (Canadian International Development Agency). Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.

Donor(s): Mrs. Norma L. Valeriote
Qualification(s): International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.
Amount: Several of varying amounts

Ontario Co-operatives R.P. Forshaw Bursary [I3013]
The Co-operatives, Credit Unions, friends and associates of Prof. R. P. Forshaw have established this bursary. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7 and a letter indicating membership of co-op or credit unions.

Donor(s): The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw
Qualification(s): Undergraduate students who have financial need. Preference may be given to candidates who have been or are members of a co-operative or credit union.
Amount: 1 award of $400

Ontario First Generation Bursary [I3062]
The Ministry of Advanced Education & Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.

Donor(s): Ministry of Advanced Education & Skills Development (MAESD)
Qualification(s): Students registered in any program who are first generation students, Ontario residents (as defined by OSAP) and who have demonstrated financial need.
Amount: several awards ranging in values from $1,000 to $3,500

Robert Auger Humanitarian Bursary [I3058]
Established in memory of Bob Auger, a former Associate Registrar at the University of Guelph. It is intended as an emergency fund to assist students who unexpectedly find themselves in difficult financial situation who could benefit from receiving a grocery voucher. To be considered, students must have completed a Financial Aid Assessment form and arrange an appointment with a Financial Aid Counselor. Applications can be made by calling 519-824-4120 extension 58715.

Donor(s): Family and friends of Robert Auger
Qualification(s): Students registered in any degree program with an unexpected financial emergency.
Amount: Several grocery vouchers or book vouchers

Scotiabank Bursaries [I3532]
Established by Scotiabank, with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Scotiabank with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 2 awards of $1,500

Shirley Endean Bursaries [I3570]
These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Estate of Shirley E. Endean & multiple donors with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: Several awards of varying amounts

Student Financial Services Bursary [I3107]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph
Qualification(s): Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.
Amount: Several awards up to a maximum of $6,000

Uffelmann Connor Family Bursary for Indigenous Students [I3109]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Métis or Inuit).

Donor(s): Maris Uffelmann and Dean Connor
Qualification(s): Students registered in any program who self-identify with First Nations (Status and non-Status), Métis or Inuit ancestry and who demonstrates financial need.
Amount: 1 award of $1,000

Uffelmann Connor Family First Generation Bursary [I3108]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as a first-generation student.

Donor(s): Maris Uffelmann and Dean Connor
Qualification(s): Students registered in any program who is a first-generation student (first generation students (parents did not attend post-secondary studies, full-time or part-time, in or outside Canada at any time or in any program) registered in any program with demonstrated financial need. and who demonstrates financial need.
Amount: 1 award of $1,000
University of Guelph Access Bursaries [I3522]
Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.
ACCESS AWARD.

Donor(s): Alumni and Friend of the University of Guelph with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of $500, Several awards of $2,000

University of Guelph Alumni Association Access Bursaries [I3523]
Established by the University of Guelph Alumni Association, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.
ACCESS AWARD.

Donor(s): University of Guelph Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $1,250

University of Guelph International Bursary [I3048]
The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Students should apply to the International Student Advisor by Nov. 1 for the fall semester; March 1 for the winter semester, and July 2 for the summer semester with a completed International Student Financial Need Assessment Form (N.A.F.). If students have an emergency situation, please contact the International Student Advisor, in Student Life, University Centre, Level 3.

Donor(s): University of Guelph
Qualification(s): International students registered in a degree program who have competed a minimum of 4.0 credits and are registered in a minimum of 1.5 course credits.
Amount: Several varies

University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [I3047]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph
Qualification(s): Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.
Amount: Several awards to a maximum of $2,000

University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph
Qualification(s): Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.
Amount: Several awards up to a maximum of $6,000

University Student Assistance Program [I3057]
These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph
Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).
Amount: Several awards of various amounts to a maximum of $1,000
Bachelor of Bio-Resource Management Degree

Please refer to the General Statement on Awards for:
- Award Eligibility
- ACCESS Awards Eligibility
- Ontario Student Opportunity Trust Fund (OSOTF) Program
- How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

Entrance Scholarships

Amos & William Lowe Memorial Scholarship [E0158]
Endowed by the late William B. Lowe of Port Francis, Ontario. Preference will be given first to eligible students from the district of Rainy River, then from the district of Kenora or Thunder Bay, and finally from the remaining districts of Northern Ontario. Application is not required.
Donor(s): William B. Lowe and Amos Edgar Lowe
Qualification(s): Student entering any of the undergraduate degree programs of the Ontario Agricultural College.
Amount: 1 award of $2,000

Angelo and Frank Agro Undergraduate Scholarship [E0520]
These scholarships are provided by the Agro Scholarship Fund. Apply, by April 15, to Student Financial Services (awards@uoguelph.ca), with a one to two-page, point-form listing of 4-H activities. This list should describe current or past activities within 4H and the position titles/names, if applicable. Attach a reference letter from a 4H club official. These scholarships will be awarded to the students demonstrating the most active involvement with 4H clubs. The committee will consider any appropriate elements, such as the length of membership in 4H, leadership roles(s) in support of 4H, creativity in 4H outreach, and coordination with other rural and academic activities. Credit will be given to those who have achieved in county, provincial and national 4H competitions. Recipients must maintain full-time studies and at least a 70% program average each year for continuation of the award.
Donor(s): The Frank Agro Estate
Qualification(s): Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 - 4H projects.
Amount: 7 awards of $7,000 (payable over 4 years of study)

Atkinson Family Scholarship [E0972]
Established by the Atkinson Family in honour of Walter McFee and Johnny Atkinson for their passion for farming, family and community. Selection will be based on highest admission average. No application required.
Donor(s): Amy and Bryan Atkinson
Qualification(s): Students entering any degree program offered by the Ontario Agriculture College (OAC).
Amount: 1 award of $1,000

Barry Lee Scholarship for Agricultural Excellence [E0797]
Established to recognize Barry Lee’s 19 years of service as a Counsellor and his strong support of rural and agricultural activities in the region. Preference will be given to students from the Regional Municipality of Halton. Selection will be based on highest admission average. No application is required.
Donor(s): Regional Municipality of Halton
Qualification(s): Students entering any undergraduate program offered by OAC.
Amount: 1 award of $1,000

Board of Governors’ Scholarships [E0317]
This scholarship is considered one of the University of Guelph's most prestigious entrance scholarships with only 25 awards being awarded each year. Recipients of this scholarship are entering the program with one of the highest admission averages of that cohort. The scholarship will be renewed each year provided recipients remain registered in full-time studies and achieve a minimum 80.0% average in their previous academic year of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80.0% or better average in the previous academic year of full-time study. Payments lost cannot be added to the end of the award period. This award cannot be held with the President’s, Lincoln Alexander Chancellor’s or Chancellors’ Scholarships. Application is not required.
Donor(s): Board of Governors
Qualification(s): Academically outstanding entering students with the highest admission averages of the entering cohort.
Amount: 25 awards of $20,000 (payable over 4 years of study)

Chancellor’s Scholarships [E0688]
This scholarship was established in 2009 in honour of current and past University of Guelph Chancellors and is considered one of the most prestigious entrance awards offered by the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the President’s Scholarships, the Lincoln Alexander Chancellor’s Scholarships, or the Board of Governors’ Scholarships.
Donor(s): University of Guelph
Qualification(s): Students entering a degree program with a minimum 90% admission average who have taken leadership roles in activities that demonstrate an interest in international relations and development, or leadership roles in activities relating to arts and culture and demonstrate the potential to become a leader in society.
Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistance)

Dr. C. John Small Commonwealth Scholarship [E0611]
Established in honour of Dr. C. John Small, OAC BSA ’42, Hon. D. Law ’75, and his lifelong dedication to foreign service. Selection will be based on the assessment of: (a) a one-page submission describing the significance for the student visiting Guelph to the program of study at the partner exchange University, (b) two faculty references of no more than one-page each, and (c) consistent high performance in course work completed, as documented by a transcript of program grades to date. Apply to the Centre for International Programs by May 1 for visiting during the subsequent Fall or Winter semesters with the above mentioned documents.
Donor(s): Mrs. Jean K. Small
Qualification(s): Full-time visiting exchange students registered for at least one semester from a Commonwealth developing country who are pursuing studies or conducting research in the area of agriculture and rural development.
Amount: 1 award of $1,500

Dr. Jack Britney Scholarship [E0934]
Established in memory of Dr. Jack Britney, a graduate of ’57A and O.A.C. ’60 and former faculty member in the former School of Food Agriculture and Resource Economics and Extension Education. Selection will be based on the students entering with the highest admission average. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a statement indicating the program and where the Diploma was taken and when.
Donor(s): Friends and Associates
Qualification(s): Students entering any OAC degree program with a preference given to students who graduated from any University of Guelph Associate Diploma program.
Amount: 1 award of $1,750

Ed Carter/University of Guelph Faculty Association Scholarship [E0292]
Award is payable at $750 per annum in the student’s 1st, 3rd, and 5th semester levels, provided a cumulative average of at least a 70% is maintained. To receive the final payment, the recipient would normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.
Donor(s): University of Guelph Faculty Association
Qualification(s): Students entering any undergraduate degree program at the University of Guelph from Wellington county.
Amount: 1 award of $2,250 ($750 in the 1st, 3rd, and 5th semesters)

Ernie Kendall Science Entrance Scholarship [E0668]
Established by Ernest Kendall, O.A.C. B.S.A. 1932 and awarded to the student entering a science program with the highest admission average. Preference will be given to students that graduated from Elmira District School. This award is not tenable with the President’s Scholarships, the Lincoln Alexander Chancellor’s Scholarships or the Board of Governors’ Scholarships. Application is not required.
Donor(s): Ernest W. Kendall
Qualification(s): Students entering any sciences (B.Sc., B.Sc. (Agr.), B.Sc. (Env.), B.Sc. (Tech.), B.A.Sc., B.A.S., B.B.R.M., B.Eng.) degree program with a minimum 80.0% admission average.
Amount: 1 award of $2,000

Gordon W. Innes Scholarship [E0140]
Application is not required.
Donor(s): Gordon W. ‘Sparky’ Innes Scholarship Fund Committee of the Woodstock Agricultural Society.
Qualification(s): Student entering any degree program from Oxford County with the highest admission average.
Amount: 1 award of $1,000
### Hardy International Student Scholarship [E0659]

Selection is based on the assessment of the student’s admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.

**Donor(s):** Mrs. Marion Hardy  
**Qualification(s):** Full-time international students (defined as paying the international student tuition and fees) entering any degree program.  
**Amount:** 1 award of $2,000

### International Student Entrance Scholarships [E0408]

In support of the University’s strategic direction of internationalism, entrance scholarships are available each Fall semester to the top international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all relevant documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.

**Donor(s):** University of Guelph  
**Qualification(s):** Students on a “student visa” entering an undergraduate degree program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.  
**Amount:** Several awards ranging in value from $5,500 - $8,500

### J.D. MacLachlan Scholarship [E0170]

Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.

**Donor(s):** The J.D. MacLachlan Trust  
**Qualification(s):** Students entering any degree program at the University of Guelph.  
**Amount:** 1 award of $1,500

### Jack and Lillian MacDonald Scholarship [E0379]

Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

**Donor(s):** Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald  
**Qualification(s):** Entering students coming from the Six Nations Polytechnic (SNP).  
**Amount:** 1 award of $900

### James and Shirley MacDonald Entrance Scholarship [E0807]

James MacDonald, OAC ’50 was a past principal at Ridgeway College, now known as the Ridgeway Campus of the University of Guelph. Selection will be based on highest admission average. No application is required.

**Donor(s):** Shirley and the late James MacDonald  
**Qualification(s):** Students entering the Environmental Management Major of the Bachelor of Bio-Resource Management program.  
**Amount:** 1 award of $2,500

### James MacMillan Memorial Scholarship [E0494]

Established in memory of James MacMillan, his great uncle, by Austin Conway of Toronto. Selection will be based on highest cumulative average. Application is not required.

**Donor(s):** Austin Conway  
**Qualification(s):** Students entering any program offered by OAC who graduated from an Associate Diploma program from the University of Guelph. Preference will be given to students from Eastern Ontario which includes the counties of Prescott and Russell, Stormont, Dundas and Glengarry, Lanark, Renfrew, Leeds and Grenville, Frontenac and Lennox and Addington; and the City of Ottawa and to students entering the Bachelor of Science in Agriculture or the Bachelor of Commerce in Food and Agricultural Business, or the Bachelor of Arts with a major in Food, Agricultural and Resource Economics (FARE).  
**Amount:** 1 award of $2,500

### Lincoln Alexander Chancellor’s Scholarships [E0689]

Established in 2001 in honour of Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This award cannot be held with the President’s Scholarships, the Chancellors’ Scholarships or the Board of Governors’ Scholarships.

**Donor(s):** Many Donors  
**Qualification(s):** Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.  
**Amount:** 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

### McArthur-Humphries Scholarship [E0183]

An equal number of awards are available to students from each county. In the case of insufficient eligible applicants from one county, the awards will be given to eligible applicants from the other county. These scholarships are awarded to students with the highest admission averages. Application is not required.

**Donor(s):** Wilhelmina McArthur-Humphries Trust Fund  
**Qualification(s):** Students entering any degree program with a minimum 75% admission average from Lanark and Wellington Counties.  
**Amount:** 8 awards of $1,000

### O.A.C. ’49 Bachelor of Bio-Resource Management - Equine Entrance Scholarships [E0615]

This award has been established to support the Bachelor of Bio-Resource Management program. Students should apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining career aspirations, extracurricular and community involvement in equine related activities.

**Donor(s):** Class of O.A.C. ’49 O.A.C. Alumni Foundation  
**Qualification(s):** Students entering the first semester of the Equine major of the BBRM program with a minimum 75% admission average.  
**Amount:** 2 awards of $3,250

### OAC 1968 Scholarship [E1008]

The Class of OAC 1968 established this bursary to celebrate their 50th anniversary. In reflecting on many of their own experiences the class generously supports undergraduate students in any OAC program with demonstrated financial need. Selection will be based on greatest financial need. Students must maintain enrolment in an OAC academic program to maintain their award. Students do not need to continue to demonstrate financial need for all 4 years to continue to receive this award. Apply by April 15 with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) and a summary of agriculture related activities to Student Financial Services (awards@uoguelph.ca).

**Donor(s):** The Class of OAC 1968  
**Qualification(s):** Students entering any OAC degree program who have demonstrated financial need. Preference will be given to students who participated in agriculture-related activities/organizations during their high school career such as Junior Farmers or 4-H.  
**Amount:** 1 award of $10,000 (payable over 8 semesters)

### OAC Specialist High Skills Major Program Scholarships (SHSM) [E0832]

The scholarships will be awarded to the 3 students with the highest admission averages. No application is required.

**Donor(s):** OAC Dean’s Office Liaison Program  
**Qualification(s):** Students entering any OAC undergraduate program with a minimum 75% admission average who are/were registered in the Specialist High Skills Major (SHSM).  
**Amount:** 3 awards of $1,000
### OAC ’49 Bachelor of BioResource Management – Environmental Entrance Scholarship [E0585]

This award has been established to support the Bachelor of Bio-Resource Management program. Students should apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining career aspirations, extracurricular and community involvement in environmental or agriculture and food industries. Applicants will be selected based on the quality of their experience and/or leadership in volunteerism within the environmental or agriculture and food industries and the community. Extracurricular activities and career aspirations are also examined (eg, 4H, Environmental organizations, Junior Farmers, agricultural work experience). In the instance that there are no applicants, students with the highest admission average will be selected.

**Donor(s):** Class of O.A.C. ’49 O.A.C. Alumni Foundation  
**Qualification(s):** Students entering the Bachelor of Bio-Resource Management (BBRM) program majoring in Environmental Management with a minimum 75% admission average who have demonstrated extracurricular volunteer experience in the environmental or agriculture and food industries.

**Amount:** 2 awards of $3,250

### President’s Scholarship [E0238]

Established in 1987 in honour of their donors or distinguished members of the University and are considered one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extracurricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the Chancellors’ Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Board of Governors' Scholarships.

**Donor(s):** A number of President’s Scholarships have been named in honour of the following people and/or donors:

- **Cecil H. Franklin and Ingrid Franklin**
  - In honour of Cecil Franklin, former Chair of the Board of Governors and Honorary Fellow of the University, the University of Guelph has named one of these twelve prestigious entrance awards to recognize his financial contribution and volunteer support to the President’s Entrance Scholarship program.

- **Charles S. Humphrey**
  - In memory of Charles S. Humphrey, a former President of Hart Chemical Company Canada Ltd. and long-time friend, the University has named one of these twelve prestigious entrance awards to recognize his financial contribution through his estate to the President’s Entrance Scholarship program.

- **Jack R. Longstaffe**
  - The University of Guelph has named one of these twelve prestigious entrance awards in memory of Jack R. Longstaffe to recognize his financial contribution through his estate to the President’s Entrance Scholarship program.

- **Burton C. Matthews**
  - The University of Guelph has named one of these twelve prestigious entrance awards in honour of Burton C. Matthews to recognize his insight and leadership in establishing the President’s Entrance Scholarship program.

- **Kathleen and Frederick Metcalf**
  - Mr. and Mrs. F.T. Metcalf of Guelph have endowed this award. After a distinguished career in cable TV, broadcasting and publishing, the late Mr. Metcalf retired as President of Maclean Hunter Ltd. and Chairman of the Board of Maclean Hunter Cable Ltd. He was Honorary Chairman of Maclean Hunter Cable Ltd. and a member of the University of Guelph Heritage Board (1996).

- **Rol-land Farms Limited**
  - Two of the scholarships are endowed by the four shareholders of Rol-land Farms Limited of Blenheim, Ontario, Hank, Peter, Arthur and Eric Vander Pol and their families. The Vander Pol families are generous supporters of a number of University projects and programs.

- **Lillian Stewart Usher**
  - The University of Guelph has named one of these twelve prestigious entrance awards in honour of Lillian Stewart Usher a friend of the University to recognize the financial contribution through her estate to the President's Entrance Scholarship program.

**Qualification(s):** Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and/or communities.

**Amount:** 8 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

### Project Hero Scholarship [E0979]

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent's full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph  
**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

### Quinn Memorial Scholarship [E0578]

Established in memory of Ronald J. Quinn (O.A.C. ’35) to an entering O.A.C. international full-time or exchange student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application is not required.

**Donor(s):** Mrs. Helen Quinn (O.A.C. ’35)  
**Qualification(s):** Entering semester one of an O.A.C. program to an international full-time student or to an international exchange student with a preference to those students from developing nations.

**Amount:** 1 award of $2,000

### Ted Morwick Scholarship [E0796]

Established by Ted Morwick, honorary alumni. The student with the highest admission average will be selected. This award is conditional on maintaining a 90% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify. (i.e. The student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year.) If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with the Chancellors’, President’s or Board of Governors’ Scholarships. No application is necessary.

**Donor(s):** Mr. Edward (Ted) Morwick  
**Qualification(s):** Students entering any degree program in the College of Arts.  
**Amount:** 4 award of $8,000 (payable over four years.)

### University of Guelph Entrance Scholarships [E0291]

The value of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student's financial account in two equal payments in the fall and winter semesters. Application is not required.

**Donor(s):** University of Guelph  
**Qualification(s):** Students entering their first year of post-secondary studies for the first time with a minimum 85.0% admission average.

**Amount:** Several awards of $2,000, Several awards of $3,000
### W. Penri Morris Memorial Scholarship [E0430]
Established by the family in memory of Penri Morris, who was killed World War II action in 1944 at the age of 21. Penri grew up on the family fruit farm near Forest, Ontario. After graduating from high school, he joined the Royal Canadian Air Force and was attached to the Royal Air Force Bomber Command as a navigator at the time of this death. Awarded to the student with the highest cumulative academic performance above 75% in all courses of the last year in high school study (full-time or equivalent study). Application is not required.

**Donor(s):** Prof. Rosalina Morris  
**Qualification(s):** Students entering first year of any undergraduate program from North Lambton Secondary School in Forest, Ontario, in their absence, from Lambton County, and their absence, from Ontario.  
**Amount:** 1 award of $1,000

### Walter and Halina Slabikowski Scholarship [E0766]
This scholarship was established in memory of Walter and Halina Slabikowski who sent their first generation Canadian born children to university to enrich their lives and provide them with greater opportunities. The award will be given to the student with the highest admission average. The residence deposit must be received by published deadline date. Submit by email to awards@uoguelph.ca your full name, student ID number and a statement attesting to your parents’ place of birth and non participation in post secondary education by April 15th.

**Donor(s):** Irene Thompson and Slabikowski Family  
**Qualification(s):** Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary studies.  
**Amount:** 1 award of $1,000

### Waterloo-Wellington Science & Engineering Fair (WWSEF) Scholarship [E0619]
Established to recognize excellence of the project submissions and encourage students to pursue university studies at the University of Guelph.

**Donor(s):** University of Guelph  
**Qualification(s):** Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.  
**Amount:** various awards of $1,000

### Entrance Scholarships with Financial Need

<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Bill Klopp Memorial Scholarship [E0150]** | Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by April 15. Students should complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student). Donor(s): Ross and Mary Lou Klopp  
Qualification(s): Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.  
Amount:** 1 award of $500 |
| **Devine Family Scholarships [E4542]** | Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of Governors member, with the assistance of the Ontario government's OTSS program. These scholarships will be given out once every four years, unless the incumbent fails to qualify. The scholarship is renewed in years two, three and four with continued demonstrated financial need and full-time registration; students are required to register for no less than 2.0 credits each semester. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the "Devine Family Scholarship Application". Deadline to submit the complete application (both parts, the E.N.A.F and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenure with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Chancellors' Scholarships, but can be held with all other entrance awards. ACCESS AWARD.  
**Donor(s):** Mr. Peter J. Devine with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students who are Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person entering any University of Guelph undergraduate degree program with a minimum 80% admission average. Preference will be given to students who are Black Canadians. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** up to 2 awards of $50,000 each (payable over 4 years of study) |
| **Interhall Council Entrance Scholarship [E0636]** | Established by the Interhall Council, the residence student government that programs, advocates and represents residence students to administration and Student Housing Services (www.interhall.ca), to ensure that the residence experience remains accessible to students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15.  
**Donor(s):** Interhall Council  
**Qualification(s):** Students entering a full-time undergraduate degree program with a minimum 85.0% admission average, residing in residence during first year on the Guelph campus with demonstrated financial need and demonstrated strong leadership ability.  
**Amount:** 5 awards of $1,000 |
| **Kenneth O. Hammill-Blount Canada Scholarship [E4356]** | Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government's OSOTF program. Selection will be based on greatest financial need from the President’s, Lincoln Alexander Chancellor's or Chancellors' Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President’s, Lincoln Alexander Chancellor's or Chancellors' Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) by April 15. ACCESS AWARD.  
**Donor(s):** The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Entering students who have applied for the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 1 award of $9,600 (payable in 8 payments of $1,200) |
L. Norman Gibbins Microbiology Scholarship [E4392]
Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government’s OSOTF program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD
Donor(s): Family, friends and colleagues of Norman Gibbins with matching funding through the Ontario Trust for Student support program
Qualification(s): Students entering the Microbiology major in the B.Sc. program with a minimum 80% admission average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).
Amount: 1 award of $2,500

OAC 1966 Entrance Scholarship [E0903]
In recognition of the contribution made to our lives by the Ontario Agricultural College, the graduates of 1966 O.A.C. have established this scholarship to assist a well-qualified student to come to Guelph and become an “Aggie”. Students must complete the online Entrance Financial Need Assessment form as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted) or by April 15.
Donor(s): Class of OAC 1966
Qualification(s): Students entering any degree program offered by O.A.C with demonstrated financial need and are Ontario residents.
Amount: 2 awards of $5,000

P.A.J. Clarke Family Scholarship [E0381]
Paul and Aileen Clarke and their family established the endowment for this entrance scholarship in honour of Paul's father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining extracurricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not a requirement. This award is not tenable with the President's Scholarships or Lincoln Alexander Chancellor's Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.
Donor(s): Paul and Aileen Clarke
Qualification(s): Students with a minimum 80% average with a record of leadership and community participation. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm.
Amount: 1 award of $12,000 (payable over 4 years)

Robert C. Skipper Scholarship [E0485]
Established by Robert C. Skipper, Diploma in Agriculture 1948 and B.S.A. 1951. Selection will be based on academic standing, participation in extra-curricular activities and involvement in primary production and/or rural community activities. Financial need may also be considered. Apply to Student Financial Services (awards@uoguelph.ca) by April 15 with a one-page summary outlining activities and by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).
Donor(s): Mr. Robert C. Skipper
Qualification(s): Students entering a degree program in O.A.C that have graduated with a Diploma in Agriculture or Horticulture from the University of Guelph’s Ridgeway campus.
Amount: 1 award of $750

Entrance Bursaries

Dorothy Wright Entrance Bursary [E3075]
Established in memory of Miss Dorothy Wright, sister, and Miss Dorothy Wright, aunt, of Mr. Ivor Wright, OAC 65A this bursary supports students entering any undergraduate degree program offered by the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15.
Donor(s): Mr. R. Ivor Wright
Qualification(s): Students entering any OAC degree program who have demonstrated financial need.
Amount: 1 award of $1,000

Elizabeth Maud Hunter (Shier) Bursary [E3357]
This award was created to assist first year students in obtaining a post secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing a similar situation. Preference given to a student from the County of Brock. Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F.) for Entrance Awards. ACCESS AWARD
Donor(s): The Estate of the Late William Henry "Harry" Hunter with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students entering any degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSSF award (see General Statements on Awards).
Amount: 3 awards of up to $4,500

First Year Student Residence Bursary [E3066]
These 5 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the on-line Financial Need Assessment Form for Entrance Awards by April 15.
Donor(s): Student Housing Services
Qualification(s): Students entering any degree program with demonstrated financial need.
Amount: 5 awards of $500

Fred Hindle Bursary [E3500]
Awarded in memory of Fred Hindle, O.A.C.'38, a long-time generous supporter of his Alma Mater, who at the time of his death, wanted future students to have the same opportunity for an education as he had received. This bursary is awarded with the assistance of the Ontario government's OSOTF program. This bursary is dependent on continued demonstration of financial need and successful completion of study to advance into the next year. Students should complete the online Financial Need Assessment Form (N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.ACCESS AWARD
Donor(s): W. Roy Hindle and family with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Entering O.A.C. degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statement on Awards).
Amount: 1 award of $6,000 (payable over 4 years)

Harvey Graham Bursary [E3030]
Provided by Harvey Graham (O.A.C. ’39). Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a working farm and complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).
Donor(s): Harvey Graham, O.A.C. ’39
Qualification(s): Students entering any degree program who come from a working farm and who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.
Amount: 1 award of $1,500
International Student Entrance Bursaries [E3043]

In support of the University’s strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students entering an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar’s Entrance Award Application to Student Financial Services.

Donor(s): University of Guelph

Qualification(s): Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.

Amount: Several awards ranging in value from $1,000 to $3,000

John A. Carther Bursary [E3086]

The late John A. Carther of Cornwall Ontario has created the John A. Carther Bursary to support students from Eastern Ontario. Preference will be given to students from the counties of Stormont, Dundas and Glengarry. Apply to Student Financial Services by April 15th by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).

Donor(s): The estate of John A. Carther

Qualification(s): Students entering any program offered by the Ontario Agricultural College with demonstrated financial need.

Amount: 1 award of $2,000

McCann Family Bursaries [E3580]

Ron and Doreen McCracken from Scotland Ontario have created these bursaries in memory of his mother and father who farmed near Cobourg Ontario. These bursaries will provide opportunities for students to study agriculture and food at the OAC. Preference will be given to students who have graduated from high school with a Specialist High Skills Majors Program (SHSM). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. ACCESS AWARD.

Donor(s): Ron and Doreen McCracken with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering any undergraduate degree program offered by OAC with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSSG award (see General Statements on Awards).

Amount: 5 awards of $3,000

Registrar’s Entrance Bursaries [E0384]

Established by the University of Guelph to support entering undergraduate students with identified financial need. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Bursary, but can be held with all other entrance awards.

Donor(s): University of Guelph

Qualification(s): Students entering any degree program with a minimum registration of 1.5 credits and demonstrated financial need.

Amount: 500 awards of $4,000

Robert Arthur Stewart Bursaries [E3272]

Established in memory of Mrs. Elsa H. Stewart of Pakenham, Ontario. Mr. Stewart graduated from the Ontario Agricultural College in 1933 and Mrs. Stewart from Macdonald Institute in 1932. Applicants for these bursaries should have a good academic record and an active interest in community affairs. A letter from the student and a recommendation from the County agricultural representative or the secondary school principal should be sent to Student Financial Services by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

Donor(s): The Estate of Mrs. H. Stewart

Qualification(s): Students from the Ontario Counties of Lanark and Renfrew, and the Regional Municipality of Ottawa-Carleton, entering the 1st semester of a degree program at the University of Guelph.

Amount: 14 awards of $1,000

Steven Jones Memorial Bursaries [E3077]

Established by Mr. and Mrs. Jones in memory of their late son, Steven Jones (B.Com. ’97). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. Selection will be made on demonstrated financial need.

Donor(s): Mr. Harry Jones

Qualification(s): Students entering any degree program with demonstrated financial need.

Amount: several awards of $2,000

University of Guelph Accessibility Bursaries [E3038]

Established by the University of Guelph to support students with substantial demonstrated financial need. In addition, students will be automatically approved for to participate in the work-study program conditional on the student securing a work-study approved position on campus. Participating in the work-study program is not required to hold this bursary. Payments of this award and the eligibility to participate in the work-study program are conditional upon the recipient receiving funding through their provincial/territorial and/or federal student loan assistance program and registration in a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the Registrar’s Entrance Bursary, but can be held with all other Entrance Awards.

Donor(s): University of Guelph

Qualification(s): Students entering any degree program with demonstrated financial need and a minimum registration of 1.5 credits.

Amount: 200 awards of $14,000 (payable over 4 years) plus Work-study approval

In-course Scholarships

Aboriginal Student Engagement Scholarship [I0922]

Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA’s commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status). The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but not be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

Donor(s): Aboriginal Student Association

Qualification(s): Students registered in any program who self-identify as First Nation (status and non-status), Métis or Inuit, who are engaged in the Aboriginal community either in their home community or at the University of Guelph.

Amount: 1 award of $1,000

Alumni House Call Centre Scholarship [I1020]

Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15th with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

Donor(s): Former Employees of the Alumni House Call Centre

Qualification(s): Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.

Amount: 1 award of $1,000

Bill Taylor Memorial Scholarship [I0280]

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.

Donor(s): AMF Canada Ltd.

Qualification(s): Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or collegiate athletics.

Amount: 1 award of $900
### Braithwaite Business Scholarships [I0827]

Named in honour of Professor Bill Braithwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15th with a resume and a 500-word statement describing why business courses, in addition to their major, will benefit their future career. Shortlisted applicants may be invited for an interview with the LANG Awards Committee.

<table>
<thead>
<tr>
<th>Qualification(s):</th>
<th>Students registered in any degree program, with the exception of B.Comm., who have successfully completed 1.0 credits towards the Gordon S. Lang School of Business and Economics Certificate in Business, or students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON), who have completed 1.0 credits towards the minor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount:</td>
<td>10,500 (payable over 2 semesters)</td>
</tr>
</tbody>
</table>

### Bridge Builder Scholarship [I1050]

The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Apply to Student Financial Services by May 15th with a one-page letter outlining the volunteer activities that lead to social connections, breaking down barriers, and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people through one or more of the following: Civic engagement by facilitating community engagement, social integration and volunteerism to promote inclusion for immigrant and ethno-cultural communities; Social connections by promoting social connections and employment networking, including programs that reduce barriers and increase support for vulnerable groups; Education and empowerment by promoting intercultural understanding and break down barriers to participation in community life and decision-making. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.

<table>
<thead>
<tr>
<th>Qualification(s):</th>
<th>Students registered in any program who, through volunteer activities in the local community, have demonstrated a passion and commitment for building bridges in one or more of the following ways: facilitating social connections; breaking down barriers; and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount:</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

### Canadian Agri-Marketing Association (Ontario) Scholarship [I0541]

Selection will be based on a combination of academic achievement and greatest demonstrated interest in agri-marketing. Apply to the OAC Awards Office by May 15th with a summary of participation in the CAMA Student Chapter and/or involvement in agri-marketing initiatives as well as a letter of recommendation from a faculty member. This award may only be held once.

<table>
<thead>
<tr>
<th>Qualification(s):</th>
<th>Students registered in any program offered by OAC who have completed a minimum of 10.0 credits with a minimum 70% cumulative average and are active members of the CAMA Student Chapter and/or involved in agri-marketing initiatives.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount:</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

### CFRU Volunteer Scholarship [I0215]

The award is presented to the student who has made the most significant contribution to the operation and goals of CFRU. Apply to Student Financial Services by May 15th with a letter describing the contributions made as a volunteer with CFRU and how those contributions have supported the operation and furthered the goals of CFRU.

<table>
<thead>
<tr>
<th>Qualification(s):</th>
<th>Students registered in any program with a minimum cumulative average of 70% who have volunteered at CFRU for at least one year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount:</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

### Christina Victoria Kenny Memorial Scholarship [I1018]

The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.

<table>
<thead>
<tr>
<th>Qualification(s):</th>
<th>Students registered in any degree program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount:</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

### Class of 1970 Scholarship [I0424]

Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Class 1970: 25th Reunion Gift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Outstanding student in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Deans’ Honours List.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $1,400</td>
</tr>
</tbody>
</table>

### Collins Barrow Scholarship [I0040]

Offered by Collins Barrow, a national firm of Chartered Professional Accountants. Selection will be based on the student who has achieved the highest grade in the course ACCT*3330, Intermediate Financial Accounting, in the past academic year. In the event of a tie, the award will go to the student with the highest cumulative average. Application is not required.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Collins Barrow - Wellington Dufferin District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students who have successfully completed the course ACCT*3330, Intermediate Accounting.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

### Dairy Challenge Prize [I0811]

Supported by The Madsen Dairy Cattle Research Fund, the Dairy Challenge Prize will be awarded to students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge. No application is required.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Madsen Dairy Cattle Research Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge.</td>
</tr>
<tr>
<td>Amount:</td>
<td>several awards up to $2000</td>
</tr>
</tbody>
</table>

### David F. Boyes Apiculture Scholarship [I0031]

Established in memory of David Boyes, a technician in the Apiculture Field Laboratory. Application is not required.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>The Apiculture Club</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Student registered in the Fall semester who achieves high academic standing in Introductory Apiculture (ENVB*2210) in the previous year, demonstrates an interest in apiculture and who has participated in extracurricular activities.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $200</td>
</tr>
</tbody>
</table>

### Deans’ Scholarships [I0323]

This award was established by the Board of Governors’ in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Board of Governors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.</td>
</tr>
<tr>
<td>Amount:</td>
<td>150 awards of $2,000</td>
</tr>
</tbody>
</table>

### Donald I. Broadfoot Scholarship [I0994]

This scholarship was created in honour of Donald Broadfoot who graduated from OAC in 1950. He worked for Hy-Line Poultry (a division of Pioneer Corn Company) in the US and Canada from 1950-1974 where he conducted disease and genetic research, and during that time did a lot of work which led up to effective treatments for various diseases in poultry. Apply by May 15 to the OAC Awards Committee (oacaward@uoguelph.ca) with a letter (no more than 2 pages) outlining your interest in poultry science. Please include relevant work experience, relevant volunteer experience and/or relevant research projects that demonstrate this interest. Please include the name of the award and the award ID number in the subject line of your email as well as on your application. Please include your student number on your application. Selection will be based on the strongest demonstrated interest measured by: work experience; volunteer experience and/or projects. Students may only receive this award once.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Doug Broadfoot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in any program in OAC who have completed a minimum of 10.0 credits at the time of application and who demonstrate an interest in poultry science.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $500</td>
</tr>
<tr>
<td>Scholarship Name</td>
<td>Amount</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Douglas M. Robinson Memorial Scholarship for Excellence in Communications [10409]</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Dr. Gary Ablett Memorial Scholarship [10809]</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Dr. James (Jim) Atkinson Scholarship [11025]</td>
<td>2 awards of $1,000</td>
</tr>
<tr>
<td>Dr. R. J. Hilton Memorial Scholarship [10678]</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Dr. Ralph and Joanne Watt Scholarship [11080]</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>George A. Gray O.A.C. ’51 Varsity Scholarships [10487]</td>
<td>2 awards of $1,250</td>
</tr>
<tr>
<td>Glenn Webb Education Scholarship/ GROWMARK Foundation OAC - Guelph Campus [10897]</td>
<td>2 awards of $1,000</td>
</tr>
<tr>
<td>Governor General’s Medal [C0044]</td>
<td>2 awards of $1,000</td>
</tr>
<tr>
<td>Harry Barrett Memorial Scholarship [11046]</td>
<td>1 award of $1,500</td>
</tr>
</tbody>
</table>

IX. Scholarships and Other Awards, Bachelor of Bio-Resource Management Degree
### IX. Scholarships and Other Awards, Bachelor of Bio-Resource Management Degree

<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Amount</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>International Undergraduate Scholarship [10577]</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Established through a student referendum approved by the undergraduate student body, to recognize international students' academic merit along with involvement/leadership activities during their enrollment at the University of Guelph. Apply to Student Financial Services, by May 15, with a letter indicating involvement/extra-curricular activity since entry to the University. This award can only be held once by the student.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donor(s): International Student Organization (ISO)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification(s): Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount: several at awards of $3,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Jack and Lillian MacDonald Scholarship [E0379]</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donor(s): Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).</td>
<td>1 award of $900</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>John and Franzis Leiss Horticultural Scholarship [10565]</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selection will be based on the highest cumulative average in the horticulture (HORT) courses normally taken in years 1 and 2. In the event of a tie, financial need may be considered. Application is not required.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donor(s): Mr. Joerg Leiss, O.A.C. ’63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification(s): Students with a minimum cumulative average of 75% who have completed at least 10.0 credits and are currently registered in the Bachelor of Science in Agriculture with a major in Horticultural Science or Environmental Science.</td>
<td>1 award of $2,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>John A. Archibald Memorial Scholarship [10014]</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awarded in memory of John A. Archibald, former Director of the Horticultural Research Institute of Ontario. Apply by May 15 to the O.A.C. Awards Office (<a href="mailto:oacaward@uoguelph.ca">oacaward@uoguelph.ca</a>) with a letter (not more than two pages) listing courses taken that demonstrate your interest in soil or land science and an outline of your participation in extra-curricular activities. Please include the name of the award and the award ID in the subject line of your email. Please also include it in your letter. Selection will be based on cumulative GPA. Students may only receive this award once.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donor(s): The friends and associates of the late John A. Archibald</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification(s): OAC students registered in the Bachelor of Bio-Resource Management with a major in Environmental Management; Bachelor of Science in Environmental Sciences; Bachelor of Science in Agriculture with a major in Honours Agriculture or a major in Crop, Horticulture and Turfgrass Sciences; or Bachelor of Science with a major in Plant Science who demonstrate involvement in extra-curricular activities and who have completed a minimum of 8.0 credits and a maximum of 14.0 credits. Preference will be given to students who demonstrate an interest in soil or land science.</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>John Burton Scholarship [10642]</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Established by Dr. John Burton, BSA 1962, a former faculty member in the Department of Animal Biosciences. Selection will be based on involvement with and contribution to the horse industry, future career aspirations in the horse industry sector and participation in community activities. Preference will be given to student who have demonstrated leadership ability within the student body. Apply by May 15 to the OAC Awards Office with a letter, of no more than two-pages, outlining involvement with and contributions to the horse industry, career aspirations, and extra-curricular involvements. Awarded in the fall semester.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donor(s): Dr. John Burton</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification(s): Students registered in any program offered by the OAC who have completed between 10.0 and 12.0 credits with a minimum 70% average</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>John Eccles Scholarship [10093]</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apply to Student Financial Services, by May 15, with a letter highlighting leadership abilities through participation on residence life. Providing a reference letter would be an asset.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donor(s): Student Housing Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification(s): Full-time student registered in semester 2, 3, 4, 5 or 6 and living in residence in the Winter semester who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in residence related activities. Residence Life Staff and paid members of Interhall Council and Hall Councils are not eligible.</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Kenneth W. Hammond Scholarship [10045]</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student with the highest grade in the course ENVS*2070 “Environmental Perspectives and Human Choices.” Application is not required.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donor(s): Kenneth W. Hammond</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification(s): Students who have completed the course Environmental Perspectives and Human Choices ENVS*2070</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Kevin Durie Memorial Scholarship [10653]</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Established in memory of Kevin Durie, BA ’93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donor(s): Christine Blake-Durie</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification(s): Students who are registered in any degree program on the University of Guelph campus, are a member of Residence Life staff and are academically eligible to continue as a Residence Assistant or as part of Residence Life staff.</td>
<td>2 awards of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Kip Hunter Prize [10139]</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donor(s): Faculty, staff and students of the Philosophy Department</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification(s): Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.</td>
<td>1 Book prize</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lambda Foundation Scholarship in LBGT Studies [10591]</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LBGT peoples. Preference will be given to an applicant who is involved in the LBGT community as demonstrated by a record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a given student only once. Projects must have been completed or research proposals accepted within the past calendar year. Apply to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referencing involvement in the LBGT community and/or faculty support.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donor(s): Lambda Foundation and other donors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification(s): Students enrolled in a program with a thesis, a research essay, independent research project or course work programs pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Linda S. Allen Memorial Graduation Prize [C0914]
This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medallion, on the occasion of her second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant circumstances during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).

Donor(s): Brian Allen, Family, Friends and Colleagues of Linda S. Allen
Qualification(s): Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.
Amount: 1 award of $1,000

Lorena Karli Sears Scholarship [10968]
Professor Mark Sears, a retired Entomologist from the School of Environmental Sciences, established this scholarship in memory of his grandmother, Lorena Karli Sears who was a resourceful farm girl from the U.S., with an interest in the environment. Students will be selected by: 1.Clearly designed plan for research; 2. Student’s research potential as described by an academic reference letter from an instructor; and 3. Cumulative GPA. Apply to the OAC Awards Committee by May 15 with a statement describing your interest in research (maximum 500 words) and brief reference letter from a faculty member describing your research potential. To submit your statement, please email it as an attachment to oacaward@uoguelph.ca. Please include the title of the award and the award ID number in the subject line of your email and on your application. Please also include your student ID number on your application. Faculty members can email their reference letter to oacaward@uoguelph.ca.

Donor(s): Mark Sears
Qualification(s): OAC students who are registered in the B.Sc. (Env.), B.Sc. with a major in Environmental Biology, or the Bachelor of Bio-Resource Management with a major in Environmental Management who have completed a minimum of 12.0 credits and are registered in one of ENVS*4410, ENVS*4510, ENVS*4001/2 or another research project/Independent Study course.
Amount: 1 award of $2,500

MacSon Scholarship [11073]
Selection will be based on the highest cumulative averages. Students will be automatically considered.

Donor(s): Proceeds from the sale of the former Maclaren property that had previously been gifted.

Qualification(s): Students registered in the BBRM degree program offered by OAC who have completed 8.0 credits and not more than 15.0 credits.
Amount: 2 awards of $2,500

Nathan Max Goldman Choir Scholarships [10774]
Established in honour of Mr. Goldman, an OAC graduate (1945 and 1947) and former President of the Philharmonia Society at the University of Guelph. The scholarships will support two students who demonstrate outstanding leadership and vision in the Symphonic Choir and/or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high vocal achievement and choral leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required as a recommendation by Choir Director will be made to the SOFAM Awards Committee.

Donor(s): Mrs. Anne Goldman and the family of Nathan Max Goldman
Qualification(s): Students registered in any degree program who are currently a member of the University of Guelph Symphonic Choir and/or the Chamber Choir and have been a member of the University of Guelph Choirs for at least two years.
Amount: 2 awards of $1,000

Nick Westwood Memorial Scholarship in Spectroscopy [10982]
In recognition of Professor Nick Westwood’s enduring contributions to the field of Molecular Spectroscopy, and his devotion to academic development and achievement at all levels, his family, friends and Department of Chemistry colleagues have established this award to honour his memory. Selection will be based on the highest grade in CHEM*2070 Structure and Spectroscopy. In the event of a tie, the award will go to the student with the highest cumulative average. Application not required.

Donor(s): Staff, faculty and friends of the Department of Chemistry
Qualification(s): Students registered in any degree program with a minimum 80% cumulative average who have obtained a minimum of 80% in CHEM*2070 Structure and Spectroscopy.
Amount: 1 award of $1,000

O.A.C. Students’ Federation Medal [C0217]
Application is not required.

Donor(s): O.A.C.
Qualification(s): Graduating student in an undergraduate degree program in a major in an O.A.C. department who has been an outstanding leader in student activities at the College level throughout his or her University career.
Amount: 1 award of a Medal

OAC’s Public Speaking Scholarship [10200]
Offered by the Class of ’45 O.A.C., on the occasion of their 40th anniversary. Apply with a one page letter summarizing public speaking experience to the OAC Awards Office by May 15. Selection will be based on demonstrated excellence and effort in public speaking within or outside of the University of Guelph (i.e. TEDx, Toastmasters, 4-H, community events).

Donor(s): Mr. Aubrey Hagar
Qualification(s): Students who have completed a minimum of 15.0 credits in any program offered by OAC.
Amount: 1 award of $1,500

Parrish and Heimbecker Scholarship (formerly known as Heimbecker Scholarship in Entrepreneurship) [10388]
Parrish and Heimbecker, Limited is a private, family owned business, founded in 1906, involved in many aspects of agri-business across Canada. This scholarship was established to honour Herb Heimbecker’s service and contribution to the agri-food industry in Canada. Apply by May 15 to the OAC Awards Committee at oacaward@uoguelph.ca with a resume demonstrating the students’ level of involvement with the agricultural and food industry. Please include the name of the award and the Award ID number in the subject line of your email and on your application. Please also include your student ID number on your application. Selection will be based on demonstrated commitment to the agricultural and food industry measured by the approximate number of hours a student has dedicated per week to work and/or extracurricular and/or volunteer activities related to the agricultural and food industry during their Undergraduate degree.

Donor(s): Friends and Associates of Herb Heimbecker
Qualification(s): Students registered in any OAC program, whom have completed a minimum of 10 credits who have demonstrated their passion and commitment to the agricultural and food industry through their extracurricular and/or volunteer activities during their Undergraduate degree and who aspire to have a career in the agricultural and food industry.
Amount: 1 award of $1,000

Priscilla and Stanford Reid Trust Prize [10597]
Established in honour the first chair of the History Department, Stanford Reid, and his wife, Priscilla Reid to acknowledge the best paper written about the history of Presbyterianism and/or the Reformed tradition. Apply, by April 1, with a copy of the paper and a covering letter including contact information to the Department of History Awards Chair.

Donor(s): Priscilla and Stanford Reid Trust Fund
Qualification(s): Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.
Amount: 1 award of $500

2019-2020 Undergraduate Calendar Last Revision: July 4, 2019
IX. Scholarships and Other Awards, Bachelor of Bio-Resource Management Degree

**Professional Staff Association Future Leader Scholarship [I1132]**

This scholarship is provided to students whose leadership involvement makes a positive impact at the University of Guelph and/or the broader community. Apply by email to awards@uoguelph.ca by May 15 with one letter of reference and a personal statement (max 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average will be awarded. This award may not be held more than once.

**Donor(s):** Professional Staff Association (PSA)

**Qualification(s):** Students registered in any program who demonstrate involvement in leadership opportunities that result in positive community impact, and who are from the immediate family of full-time, part-time, contractual or retired members of the Professional/Managerial Group at the University of Guelph. Preference will be given to a student that has not received the Professional Staff Association Scholarship in the same year.

**Amount:** 1 award of $1,500

**Professional Staff Association Scholarship [I0628]**

This scholarship is provided to students with the highest cumulative average. Apply to Student Financial Services by May 15 by sending an email to awards@uoguelph.ca and include the name of the family member of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. This award may be held more than once, however, not in consecutive years. Preference will be given to students of current or retired P.S.A. members. Selection will be based on highest cumulative average.

**Donor(s):** Professional Staff Association

**Qualification(s):** Full-time students who are from the immediate family, part-time or contractual Professional/Managerial Group employees of the University, and/or retired Professional/Managerial Group of the University of Guelph who have completed at least 5.0 credits and have a minimum 70% cumulative average.

**Amount:** 1 award of $1,500

**Project Hero Scholarship [I0979]**

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph

**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

**RB Palmer Horticultural Scholarship [I1083]**

These scholarships were established by RB Palmer in support of students who are interested in plant breeding, plant genetics and horticulture. RB Palmer was particularly inspired by Ornamental Horticulture, lilies and gladiolus in particular. Apply by May 15 to the OAC Awards Office (ocawards@uoguelph.ca) with a letter (no more than two pages) listing the courses you have completed that demonstrate your interest in horticulture, plant genetics or plant breeding. Selection will be based on highest cumulative average.

**Donor(s):** RB Palmer Horticultural Fund

**Qualification(s):** Students registered in a program offered by the Ontario Agricultural College who demonstrate an interest in horticulture, plant genetics or plant breeding. Preference will be given to students who demonstrate an interest in Ornamental Horticulture.

**Amount:** 1 award of $1,000

**School of Environmental Sciences Academic Prize [C0425]**

The student with the highest cumulative average will receive this award. Application is not required.

**Donor(s):** The School of Environmental Sciences

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations, from any major in the School of Environmental Sciences (including: Bachelor of Science with a major in Environmental Biology; Bachelor of Science in Environmental Sciences with a major in Environmental Sciences; Bachelor of Bio-Resource Management with a major in Environmental Management)

**Amount:** 1 award of $1,000

**Scotiabank Scholarships in Leadership [I0834]**

Apply to the Department of Management Awards Committee by May 15 with: 1) A 500 word personal statement describing the impact of their leadership practice in a non-profit setting including the benefits both to the student and to the organization; 2) Reference letter(s) from the organization(s) in which the leadership practice took place. In the event of a tie, the award will go to the student with the highest cumulative average. Please submit your application by email to dom.awards@uoguelph.ca.

**Donor(s):** Scotiabank

**Qualification(s):** Students who have completed the Foundations of Leadership course (HROB*2010) and either completed the required 120 hours of leadership practice for the undergraduate Certificate in Leadership in a non-profit setting or are registered in the Leadership and Organizational Management major of the BComm program and have demonstrated exceptional leadership in a non-profit setting.

**Amount:** 5 awards of $1,000

**Sports Media and Sports Broadcasting Scholarships [I1035]**

Apply by May 15th to Student Financial Services by submitting a one page letter outlining sports media or sports broadcasting experience in the past year. Letters can be emailed to awards@uoguelph.ca. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minoring in Media and Cinema Studies and who have the highest GPA.

**Donor(s):** Rogers Media Inc.

**Qualification(s):** Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas. To be awarded to an undergraduate student first, then to a graduate student if no undergraduate students apply.

**Amount:** 2 awards of $2,500

**Stephanie Wilken Volunteer Scholarship [I0449]**

Established by the Wilken family in memory of Stephanie Wilken, BA 1995. Apply to Student Financial Services with letter indicating the kind and extent of volunteer activities at the Wellness Centre by October 1. Selection committee is the Senate Committee on Awards on the recommendation of the Student Wellness Educator at the Wellness Centre.

**Donor(s):** Bev and Darlene Wilken

**Qualification(s):** Student registered in any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre.

**Amount:** 1 award of $1,000
The Summerlee Humanitarian Scholarships are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues of global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a varsity athlete (varsity athletes should self-identify in their letter). While applicants who demonstrate past significant impacts in improving local communities/groups will be considered, preference will be given to applicants with strong previous proven international humanitarian efforts. Recipients must adhere to the University of Guelph’s Safe Travel Policy.

**Donor(s):** The Angel Gabriel Foundation  
**Qualification(s):** Students registered in any program with no more than 17.0 credits completed who have demonstrated a commitment to humanitarian efforts including but not limited to those affecting refugees, displaced persons, and populations affected by conflict and natural disasters through volunteer positions, prior employment and/or extra-curricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.

**Amount:** 5 awards of $10,000 ($5,000 in each of the fall and winter semesters), plus an additional up to $4,000 to support travel costs

<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Amount</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summerlee Humanitarian Scholarships [10964]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Susan Travers Memorial Scholarship [10975]</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thomas H. Peters Scholarship [10233]</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toronto District Beekeeper’s Association Scholarship [10285]</td>
<td>1 award of $500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Steelworkers Local 4120 Scholarship [10293]</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Guelph Alumni Legacy Scholarship [10735]</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Guelph Retirees Association Scholarship [10569]</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Stralen and Van Der Hoeven Memorial Scholarship [10296]</td>
<td>1 award of $2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W.C. Winegard Medal [C0311]</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W.N. Vaughan Medal [C0299]</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The scholarship will be awarded to the student who has demonstrated academic achievement and exemplary leadership. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca a one-page summary demonstrating leadership skills gained through participation in extracurricular activities, both within the university and the broader community. Preference will be given to students who have completed between 3 and 10 credits at the time of application for the award.

**Donor(s):** Mr. & Mrs. J. Van Stralen & family & Mr. & Mrs. Hans Van Der Hoeven & family

**Qualification(s):** Students registered in any program who have achieved a minimum of 80% cumulative average and participated in extra-curricular activities.

**Amount:** 1 award of $2,000

**Donor(s):** The Board of Governors of the University

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations who excel both academically and in contributions made to the university and community life.

**Amount:** 1 award of a Gold medal
### Warren Stein Memorial Scholarship [I0955]
Apply by May 15th to the OAC awards committee (oacaward@uoguelph.ca) with a letter (maximum 2 pages) outlining your studies related to swine. Please include the name of the award and the award ID number in the subject line of your email and on your letter. Selection will be based on the highest cumulative average.

**Donor(s):** Canadian Swine Breeders Association  
**Qualification(s):** Students registered in any program offered by OAC who have completed 10.0 credits or more and who are engaged in swine related studies.  
**Amount:** 1 award of $2,000

### In-course Scholarships with Financial Need

#### Anne and Ross Bronson Scholarship in Environmental Science [I4514]
Established by the family of Anne and Ross Bronson in honour of their 50th wedding anniversary with the aid of the Ontario government’s OTSS program. Preference will be given to students with a farming background. Apply by October 7th with a letter indicating leadership abilities and involvement in the university and/or broader community and farming background and a completed Financial Need Assessment Form to Student Financial Services. ACCESS AWARD.

**Donor(s):** Anne and Ross Bronson with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students registered in the Bachelor of Science in Environmental Sciences or Bachelor of Bio-Resource Management Degree Environmental Management Major who have completed a minimum of 4.0 credits with demonstrated leadership abilities and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** 1 award of $3,200

#### Brian Kenneth Howard Memorial Scholarship [I4548]
Established by Kenneth and Irene Howard in memory of their son, Brian Kenneth Howard. Awarded to a student assessed as having financial need with a preference given to students from York, Durham or Simcoe counties. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Kenneth and Irene Howard with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Student registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** 1 award of $3,000

#### City of Guelph 175th Anniversary Scholarship [I0515]
Funded by a leadership gift from the City of Guelph and donations from business and community leaders, this scholarship was established in 2002. Apply to Student Financial Services by October 7 with a letter describing volunteer activities, one reference letter from an individual familiar with the volunteer and/or community service contributions, and a completed Financial Need Assessment Form (N.A.F.). Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need. This award may be held only once.

**Donor(s):** The Guelph Community Foundation  
**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70.0% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.  
**Amount:** 1 award of $2,000

#### Dr. Kenneth & Nancy Lawless [I4552]
Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Dr. Kenneth W. Lawless with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Student registered in any program offered by the Ontario Agricultural College who has completed at least 5 credits with a minimum cumulative average of 75% and has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** 1 award of $2,700

### Erin Demers Memorial Scholarship [I0406]
The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.), along with one supporting reference letter from a Residence Assistant, Residence Manager, or Residence Officer.

**Donor(s):** Family and friends of Erin Katrina Demers  
**Qualification(s):** Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.  
**Amount:** 1 award of $1,800

### Euclid-Hitachi Scholarships [I4517]
Established by Euclid-Hitachi of Canada Ltd., with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 2 awards of $1,500

### Graham Family Incentive Scholarship [I4506]
Provided by Harvey Graham (O.A.C. ’39) with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** Harvey Graham O.A.C. ’39 with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Applicants entering the fourth year of a four year degree program, maintaining at least a 70% program average and demonstrating financial need, who have previously received the Harvey Graham Bursary. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 1 award of $6,000

### Guelph Campus Co-operative Centennial Scholarship [I0867]
In recognition of the Guelph Campus Co-operative’s centennial anniversary and the students who founded it, this scholarship is awarded to a student who has demonstrated financial need. Preference will be given to students who are members of the Guelph Campus Co-operative. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form and a photocopy of your valid co-operative membership card.

**Donor(s):** Guelph Campus Co-operative  
**Qualification(s):** Students registered in any program at the University of Guelph who have completed a minimum of 5.0 credits with a minimum cumulative average of 75% and have demonstrated financial need.  
**Amount:** 1 award of $1,000
Nora Spence Memorial Scholarship [I4394]

This scholarship was created by George and Jane Spence in memory of their daughter Nora Spence, O.A.C. BSc '86 with the aid of the Ontario government’s OTSS program. Selection will be based on high academic achievement. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Jane and George Spence with matching funding through the Ontario Trust
Qualification(s): BSc students registered in a major offered by O.A.C. who have a minimum cumulative average of 75% and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 1 award of $1,750

R. Douglas and Kathleen Kennedy Scholarship in O.A.C. [I0547]

Douglas (O.A.C. '39) and Kathleen (MAC '39) Kennedy met at a "hop" on campus in 1937 and later married. They established this scholarship to celebrate their time on campus and their 62 years of marriage. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy
Qualification(s): This scholarship will be awarded to a student in O.A.C. with high academic achievement and demonstrated financial need.
Amount: 1 award of $1,200

Residence Life Staff Scholarship [I0697]

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date.

Donor(s): Student Housing Services
Qualification(s): Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program.
Amount: 2 awards of $500

Returning Student Residence Scholarship [I0696]

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award.

Donor(s): Student Housing Services
Qualification(s): Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average.
Amount: 3 awards of $500

Robert, Louis and Helen Shaw Memorial Degree Scholarships [I4520]

Established by the Shaw Scholarship Committee with the assistance of the Ontario government's OSOTF program. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): The Shaw Scholarship Committee with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in the BSc Agr, BLA, BSc with a major in Plant Agriculture or BBRM.EQM programs with demonstrated financial need, and a 70% cumulative average Preference will be given first to first year students from Peterborough County and then to students from Peterborough County. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

Tara Lynn Giuliani Memorial Scholarship [I0375]

Funded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form. Selection is based on financial need.

Donor(s): Tara Lynn Giuliani Foundation at the Hamilton Community Foundation
Qualification(s): Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services and who have demonstrated financial need. Preference given to students with a visual impairment.
Amount: 1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000

William & Nona Haslup Scholarship [I0589]

Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7. Recipients of this award can have this award renewed for up to 3 years provided they continue to demonstrate financial need and maintain a minimum 70% cumulative average of full-time (minimum 80% of a full course load) study. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): The William and Nona Haslup Foundation
Qualification(s): Students that have completed 4.0 credits but no more than 6.0 credits in any degree program; are a Canadian citizen/permanent resident; have a minimum 70% cumulative average; and demonstrate financial need.
Amount: 2 awards of $15,000

In-course Bursaries

Acer Saccharum Bursary [I3083]

Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and confirmation of registration with Student Accessibility Services.

Donor(s): Steven Ardran and Celine Batterink
Qualification(s): Students registered in any degree program at the University of Guelph, who have demonstrated financial need and are registered with Student Accessibility Services.
Amount: 1 award of $1,000

Brinson Partners Inc. Bursaries [I3526]

Brinson Partners Inc., with the assistance of the Ontario government's OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Brinson Partners Inc. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 2 awards of $1,500

Burnbrae Farms Bursaries [I3525]

Established by Burnbrae Farms, with the assistance of the Ontario government's OSOTF program to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement explaining interests in poultry science to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 2 awards of $1,000

Campbell-Ouellette Family Bursary [I3998]

Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family’s broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Dr. Malcolm Campbell
Qualification(s): Students registered in any program with demonstrated financial need.
Amount: 1 award of $2,000
<table>
<thead>
<tr>
<th>Class of ’72: 25th Reunion Bursaries [I3512]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the Class of ’72: 25th Reunion Fund with the assistance of the Ontario government’s OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. <strong>ACCESS AWARD.</strong></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Class of ’72: 25th Reunion with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 3 awards of $1,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class of O.A.C. ’33 Bursaries [I3531]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the class of O.A.C. ’33 on the occasion of their 65th Anniversary, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. <strong>ACCESS AWARD.</strong></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Class of 1933 (in honour of the late Prof. W.I.J. Squirrell) with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several awards of varying amounts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class of O.A.C. ’36 Bursaries [I3501]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the Class of O.A.C. ’36 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. <strong>ACCESS AWARD.</strong></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Class of 1936 with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> An O.A.C. degree student enrolled in any degree program who has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several awards of varying amounts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>David Havoic Bursary [I3087]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by David Havoic, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to the student with the greatest financial need. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and a letter from Student Accessibility Services confirming registration and physical disability.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Debbie and David Havoic</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $1,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>David R. Leach Memorial Bursary [I3534]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established in memory of David R. Leach by his family, with the assistance of the Ontario government’s OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. 73 and graduated with a B.Sc. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7. <strong>ACCESS AWARD.</strong></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Mrs Deborah Leach-Sartor with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students who are physically disabled as determined by the Student Accessibility Services and who have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $1,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Denis and Patricia Yates Bursary [I3097]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by Charlotte Yates in memory of her parents who were strong advocates for the value of education in society. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Dr. Malcolm Campbell</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any program with demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $2,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dr. Gordon Macleod Memorial Bursary [I3093]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established in memory of Dr. Gordon Macleod and in dedication to his interest in the dairy industry. Apply to Student Financial Services (<a href="mailto:awards@uoguelph.ca">awards@uoguelph.ca</a>) with a completed Financial Need Assessment Form (N.A.F.) and a letter reflecting on your interest in dairy related studies by October 7. Please be sure to include your name, student ID number, your program of study and the award you’re applying to on your letter and application. Please email your application to <a href="mailto:awards@uoguelph.ca">awards@uoguelph.ca</a> and include the award name and ID number in the subject line.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Cynthia Macleod</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any degree program offered by OAC, who have financial need and who can demonstrate an interest in dairy related studies.</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $3,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elizabeth Burton Bursaries [I3503]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Elizabeth Burton, with the assistance of the Ontario government’s OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. <strong>ACCESS AWARD.</strong></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several awards of varying amounts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F. Elsie M. Brown and William R. Brown Bursary [I3091]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supported by a gift from the Estate of Fredelene Elsie May Brown and her predeceased husband, William Robert Brown. Apply to Student Financial Services by Oct 7 with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. <strong>ACCESS AWARD.</strong></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Estate of Fredeline Elsie May Brown</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any program offered by in the OAC who have completed at least 10.0 credits and demonstrate financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> 2 awards of $2.500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gryphon Investment Council Bursaries [I3513]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. <strong>ACCESS AWARD.</strong></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 2 awards of $1,500</td>
</tr>
</tbody>
</table>
Guelph Compassionate Health and Dental Bursary [I3061]

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph’s mandatory Student Health Plan, University of Guelph’s Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment form; (2) a letter from physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and its impact on the student’s studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) Insurance coverage - proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

Donor(s): Student Health and Dental Plan Reserve
Qualification(s): Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student’s academic progress.

Amount: Several awards of various amounts to a maximum of $1,500

Guelph Student Assistance ACCESS Bursaries [I3556]

These bursaries have been established and approved by undergraduate students through student referendum with the aid of the Ontario government’s OTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: Several awards of varying amounts up to $1,000

Guelph Student Assistance Program [I3056]

These bursaries have been established and approved by undergraduate students through student referendum to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): Undergraduate Students
Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need.

Amount: Several awards of varying amounts up to $1,000

Gwen Karr Memorial Bursary [I3010]

Mr. T.K.C. Karr, O.A.C. ’32, has provided an endowment fund to assist students in a degree or diploma program of the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Mr. T.K.C. Karr, O.A.C. ’32
Qualification(s): O.A.C. students with demonstrated financial need.

Amount: Several awards of various amounts

Helen Mahon Memorial Bursary [I3063]

Established in memory of Helen Mahon, a longtime employee of the University of Guelph and who, following the death of her husband, raised three young children alone, all of whom graduated from university. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a statement that indicates you meet the criteria of this bursary. Awarded in the winter.

Donor(s): Family and Friends of Helen Mahon
Qualification(s): Students registered in any program who come from a family where one parent is deceased.

Amount: 1 award of $500

Howard and Myrtle Rogers Bursaries [I3537]

Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): The Estate of Howard and Myrtle Rogers with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate on-going financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 10 up to $2,000

Indigenous Student Bursary [I3068]

In 2009, the Ministry of Advanced Education and Skills Development established the Aboriginal Post-Secondary Education Funding Initiative. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with financing their education. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and complete the Indigenous Student Bursary application. Selection is based on financial need.

Donor(s): Ministry of Advanced Education and Skills Development (MAESD)
Qualification(s): Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP) and have demonstrated financial need.

Amount: several awards ranging in values from $1,000 to $3,500

International Emergency Medical Aid Assistance [I3059]

The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an on-going basis.

Donor(s): University of Guelph
Qualification(s): International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.

Amount: Several awards of varying amounts

Irvine and Grace Black Memorial Bursary [I3051]

Established in memory of Irvine and Grace Black, by friends and family to recognize their many contributions to young people. Irvine, a well-known sheep breeder, was a judge at College Royal and the Royal Winter Fair for over fifty years, and Grace was active in the Women’s Institute and the Fergus Fall Fair. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining involvement in the 4-H Club and/or a Women’s Institute by October 7.

Donor(s): Family and Friends of Irvine and Grace Black
Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to applicants who are, or have been, active in the 4-H Club and/or a Women’s Institute.

Amount: 1 award of $500
Ivey Cook Bursaries [I3076]
Apply to SAS using the "New Student Intake Form" and a letter explaining your situation and attach documentation showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first-come first-served basis, based on the validity and need for an assessment.

Donor(s): Suzanne Ivan Ivey Cook
Qualification(s): Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment.
Amount: several awards of up to $1,000

Madison Gough Memorial Bursary [I3103]
Established by the friends and family of Madison Gough, a gentle, kind spirit who was inspired by nature, animals, or music and passionate about acceptance of difference. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Bob Gough and Laura Ladouceur
Qualification(s): Students registered in any program who have demonstrated financial need.
Amount: 1 award of $1,000

Mary I. Whitelock Bursaries [I3254]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Estate of Mary I. Whitelock with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 13 awards of $2,000

Métis Nation of Ontario Bursaries [I3092]
The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and a statement confirming Métis status and include your card number.

Donor(s): Métis Nation of Ontario
Qualification(s): Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.
Amount: 1 award of $1,000

Murray P. And Florence L. Hannah Bursaries [I3571]
Preference will be given to students from the County of Northumberland. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Estate of Florence Hannah with matching funding through the Ontario Trust for Student Support program
Qualification(s): OAC students registered in the BSc(Agr) or the BSc(Env) program who have completed a minimum of 4.0 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: several awards of varying amounts

Norma Valeriote International Student Bursaries [I3009]
Preference given to a student from a country of focus as defined by CIDA (Canadian International Development Agency). Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.

Donor(s): Mrs. Norma L. Valeriote
Qualification(s): International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.
Amount: Several of varying amounts

O.A.C. ’38 Lloyd Minshall Bursaries [I3529]
Established by O.A.C. ’38 Alumni, with the assistance of the Ontario government’s OSOTF program, to recognize the many contributions of Lloyd Minshall to his classmates and to O.A.C. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): O.A.C. ’38 Alumni with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: several awards of varying amounts

O.A.C. ’55 Access Bursaries [I3157]
Provided by the class of O.A.C. ’55 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): O.A.C. Class of ’55 with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students at any semester level in an O.A.C. degree program or students enrolled in the B.ENG. program with demonstrated financial need and a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).
Amount: several awards of varying amounts

O.A.C. ’57 Bursaries [I3518]
Provided by the Class of O.A.C. ’57 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): O.A.C. ’57 and the O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).
Amount: several awards of varying amounts

O.A.C. Alumni Foundation Access Bursaries [I3533]
Provided by the O.A.C. Alumni Foundation, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: several awards of varying amounts

OAC Student Aid Bursary [I3590]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Anonymous with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any OAC Undergraduate Degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: several awards of varying amounts totalling $8,000

Ontario Co-operatives R.P. Forshaw Bursary [I3013]
The Co-operatives, Credit Unions, friends and associates of Prof. R. P. Forshaw have established this bursary. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7 and a letter indicating membership of co-op or credit unions.

Donor(s): The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw
Qualification(s): Undergraduate students who have financial need. Preference may be given to candidates who have been or are members of a co-operative or credit union.
Amount: 1 award of $400
Ontario First Generation Bursary [I3062]
The Ministry of Advanced Education & Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.

**Donor(s):** Ministry of Advanced Education & Skills Development (MAESD)  
**Qualification(s):** Students registered in any program who are first generation students, Ontario residents (as defined by OSAP) and who have demonstrated financial need.  
**Amount:** several awards ranging in values from $1,000 to $3,500

Ontario Grape Growers Bursary [I3033]
Offered by the Ontario Grape Growers Action Committee. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** The Ontario Grape Growers Action Committee  
**Qualification(s):** Students with good academic standing in semesters 3 to 6 of a degree program or semesters 3 to 4 of a diploma program administered by O.A.C., and demonstrated need of financial assistance.  
**Amount:** Several of various amounts

Robert Auger Humanitarian Bursary [I3058]
Established in memory of Bob Auger, a former Associate Registrar at the University of Guelph. It is intended as an emergency fund to assist students who unexpectedly find themselves in difficult financial situation who could benefit from receiving a grocery voucher. To be considered, students must have completed a Financial Aid Assessment form and arrange an appointment with Financial Aid Counsellor. Appointments can be made by calling 519-824-4120 extension 38715.

**Donor(s):** Family and friends of Robert Auger  
**Qualification(s):** Students registered in any degree program with an unexpected financial emergency.  
**Amount:** Several grocery vouchers or book vouchers

Scotiabank Bursaries [I3532]
Established by Scotiabank, with the assistance of the Ontario government's OSOTF program, to assist students with financial need to continue their studies as full-time students. Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Scotiabank with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 2 awards of $1,500

Shirley Endean Bursaries [I3570]
These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Estate of Shirley E. Endean & multiple donors with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** Several awards of varying amounts

Student Financial Services Bursary [I3107]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.  
**Amount:** Several awards up to a maximum of $6,000

T.K. Warley Bursaries [I3510]
Established by O.A.C. Alumni Association, with the assistance of the Ontario government's OSOTF program, to recognize Professor T.K. Warley's significant contribution to the O.A.C. Alumni Foundation and to students through teaching and promotion/development of "Experience Agriculture". A degree student may receive this bursary twice. Apply by letter outlining extracurricular involvement and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** O.A.C. Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need who are in semester 5 to 8 of any degree program within O.A.C. A minimum 65% is required, as is participation in student activities, governance, and/or college affairs. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** Several awards of varying amounts

Uffelmann Connor Family Bursary for Indigenous Students [I3109]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Métis or Inuit).

**Donor(s):** Maris Uffelmann and Dean Connor  
**Qualification(s):** Students registered in any program who self-identify with First Nations (Status and non-Status), Métis or Inuit ancestry and who demonstrates financial need.  
**Amount:** 1 award of $1,000

Uffelmann Connor Family First Generation Bursary [I3108]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as a first-generation student.

**Donor(s):** Maris Uffelmann and Dean Connor  
**Qualification(s):** Students registered in any program who is a first-generation student (First generation students (parents did not attend post-secondary studies, full-time or part-time, in or outside Canada at any time or in any program) registered in any program with demonstrated financial need, and who demonstrates financial need.  
**Amount:** 1 award of $1,000

University of Guelph Access Bursaries [I3522]
Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Alumni and Friends of the University of Guelph with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** Several awards of $500, Several awards of $2,000

University of Guelph Alumni Association Access Bursaries [I3523]
Established by the University of Guelph Alumni Association, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** University of Guelph Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 1 award of $1,250

Last Revision: July 4, 2019
University of Guelph International Bursary [I3048]
The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Amount: Several awards

University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [I3047]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Amount: Several awards to a maximum of $2,000

University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Amount: Several awards up to a maximum of $6,000

University Student Assistance Program [I3057]
These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Amount: Several awards of various amounts to a maximum of $1,000

Virginia Conner Memorial Bursary [I3110]
Apply by October 7th to the Student Financial Services with a completed Financial Need Assessment form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. Selection will be based on financial need.

Amount: several awards of up to $2,000

William Barlow Memorial Bursary [I3101]
This bursary was created to recognize the farming contributions and community spirit of Mr. Barlow. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Amount: 1 award of $3,000

F.E. Wolff International Scholarship [T0313]
The late Frank E. Wolff was a faculty member and a graduate of O.A.C. He was active in the O.A.C. Alumni Foundation and in the establishment of the O.A.C. Alumni Foundation. This scholarship fund was established in memory of Frank E. Wolff, Mr. A.O. Wolff and family. As a faculty member, he studied the techniques of artificial insemination of cattle in Denmark and upon his return in 1939, employed these techniques in the O.A.C. herd. Apply to the OAC Awards Office by February 1 with a letter outlining the cost of your trip for this course. Please be sure to include your name, student ID number, your program of study and the award you’re applying to on your application. Please email your application to oacaward@uoguelph.ca and include the award name and ID number in the subject line.

Amount: several awards of varying amounts

O.A.C. ’54 International Study Scholarship [T0586]
Established in memory of Beth Duncan to support students participating in an exchange program, study abroad semester, or a field trip course. Submit a letter (of not more than two pages) outlining the intended international study program, reasons for choosing the program and the anticipated benefits of participation. Letters should also include a brief summary of extracurricular and student related activities. Letters of reference will be considered. Apply to the O.A.C. Awards Office by May 15, no more than two semesters prior to the commencement of the program.

Amount: 2 awards of $3,000
Bachelor of Commerce

Please refer to the General Statement on Awards for:

- Award Eligibility
- ACCESS Awards Eligibility
- Ontario Student Opportunity Trust Fund (OSOTF) Program
- How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

Entrance Scholarships

Amos & William Lowe Memorial Scholarship [E0158]
Endowed by the late William B. Lowe of Fort Francis, Ontario. Preference will be given first to eligible students from the district of Rainy River, then from the district of Kenora or Thunder Bay, and finally from the remaining districts of Northern Ontario. Application is not required.

Donor(s): William B. Lowe and Amos Edgar Lowe
Qualification(s): Student entering any of the undergraduate degree programs of the Ontario Agricultural College.
Amount: 1 award of $2,000

Angelo and Frank Agro Undergraduate Scholarship [E0520]
These scholarships are provided by the Agro Scholarship Fund. Apply, by April 15, to Student Financial Services (awards@uoguelph.ca), with a one to two-page, point-form listing of 4-H activities. This list should describe current or past activities within 4H and the position titles/names, if applicable. Attach a reference letter from a 4H club official. These scholarships will be awarded to the students demonstrating the most active involvement with 4H clubs. The committee will consider any appropriate elements, such as the length of membership in 4H, leadership role(s) in support of 4H, creativity in 4H outreach, and coordination with other rural and academic activities. Credit will be given to those who have achieved in county, provincial and National 4H competitions. Recipients must maintain full-time studies and at least a 70% program average each year for continuation of the award.

Donor(s): The Frank Agro Estate
Qualification(s): Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 - 4H projects.
Amount: 7 awards of $7,000 (payable over 4 years of study)

Atkinson Family Scholarship [E0972]
Established by the Atkinson Family in honour of Walter McFee and Johnny Atkinson for their passion for farming, family and community. Selection will be based on highest admission average. No application required.

Donor(s): Amy and Bryan Atkinson
Qualification(s): Students entering any degree program offered by the Ontario Agriculture College (OAC).
Amount: 1 award of $1,000

Barry Lee Scholarship for Agricultural Excellence [E0797]
Established to recognize Barry Lee’s 19 years of service as a Counsellor and his strong support of rural and agricultural activities in the region. Preference will be given to students from the Regional Municipality of Halton. Selection will be based on highest admission average. No application is required.

Donor(s): Regional Municipality of Halton
Qualification(s): Students entering any undergraduate program offered by OAC.
Amount: 1 award of $1,000

Board of Governors’ Scholarships [E0317]
This scholarship is considered one of the University of Guelph’s most prestigious entrance scholarships with only 25 awards being awarded each year. Recipients of this scholarship are entering their program with one of the highest admission averages of that cohort. The scholarship will be renewed each year provided recipients remain registered in full-time studies and achieve a minimum 80.0% average in their previous academic year of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80.0% or better average in the previous academic year of full time study. Payments lost cannot be added to the end of the award period. This award cannot be held with the President’s, Lincoln Alexander Chancellor's or Chancellor's Scholarships. Application is not required.

Donor(s): Board of Governors
Qualification(s): Academically outstanding entering students with the highest admission averages of the entering cohort.
Amount: 25 awards of $20,000 (payable over 4 years of study)

Chancellor’s Scholarships [E0688]
This scholarship was established in 2009 in honour of current and past University of Guelph Chancellors and is considered one of the most prestigious entrance awards offered by the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the President’s Scholarships, the Lincoln Alexander Chancellor's Scholarships, or the Board of Governors’ Scholarships.

Donor(s): University of Guelph
Qualification(s): Students entering a degree program with a minimum 90% admission average who have taken leadership roles in activities that demonstrate an interest in international relations and development, or leadership roles in activities relating to arts and culture and demonstrate the potential to become a leader in society.
Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

Dr. C. John Small Commonwealth Scholarship [E0611]
Established in honour of Dr. C. John Small, OAC BSA ’42, Hon D. Law ’75, and his lifelong dedication to foreign service. Selection will be based on the assessment of: (a) a one-page submission describing the significance for the student visiting Guelph to the program of study at the partner exchange University, (b) two faculty references of no more than one-page each, and (c) consistent high performance in course work completed, as documented by a transcript of program grades to date. Apply to the Centre for International Programs by May 1 for visiting during the subsequent Fall or Winter semesters with the above mentioned documents.

Donor(s): Mrs. Jean K. Small
Qualification(s): Full-time visiting exchange students registered for at least one semester from a Commonwealth developing country who are pursuing studies or conducting research in the area of agriculture and rural development.
Amount: 1 award of $1,500

Dr. Jack Britney Scholarship [E0934]
Established in memory of Dr. Jack Britney, a graduate of ’57A and O.A.C. ’60 and former faculty member in the former School of Food Agriculture and Resource Economics and Extension Education. Selection will be based on the students entering with the highest admission average. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a statement indicating the program and where the Diploma was taken and when.

Donor(s): Friends and Associates
Qualification(s): Students entering any OAC degree program with a preference given to students who graduated from any University of Guelph Associate Diploma program.
Amount: 1 award of $1,750

Ed Carter/University of Guelph Faculty Association Scholarship [E0292]
Award is payable at $750 per annum in the student’s 1st, 3rd, and 5th semester levels, provided a cumulative average of at least a 70% is maintained. To receive the final payment, the recipient would normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.

Donor(s): University of Guelph Faculty Association
Qualification(s): Students entering any undergraduate degree program at the University of Guelph from Wellington county.
Amount: 1 award of $2,250 ($750 in the 1st, 3rd, and 5th semesters)

Fidelity Investments Canada Management Economics and Finance Scholarship [E1094]
Awarded to the students entering with the top two highest admission averages. In the event of a tie the student with the highest grade in ENG4U will receive the award.
Application is not required.

Donor(s): Fidelity Investments Canada ULC
Qualification(s): Female students entering the BCOM program with a major in Management and Economics Finance.
Amount: 2 awards of $4,000
GFTC Legacy Fund Experience Scholarships [E0918]
In recognition of the Guelph Food Technology Centre’s (GFTC) long association with University of Guelph the GFTC Board has created these scholarships. These scholarships recognize academic excellence and encourage students to study and pursue careers in the food sector. Selection is based on academic achievement, quality of past work experience and relevant future career goals. This scholarship is not tenable with the GFTC Legacy Fund Undergraduate Entrance Scholarships. Application by April 15 to Student Financial Services (awards@uoguelph.ca) by submitting a one page letter outlining past work experience and a one page letter outlining commitment to future career goals in the food sector. In order to maintain eligibility, recipients must remain registered in one of the specified programs.
Donor(s): The Guelph Food Technology Centre (GFTC)
Amount: 4 awards of $11,500 (payable over 4 years of study)

GFTC Legacy Fund UG Entrance Scholarship [E0899]
In recognition of the Guelph Food Technology Centre’s (GFTC) long association with University of Guelph the GFTC Board has created the GFTC Legacy Fund Undergraduate Entrance Scholarships. These scholarships recognize academic excellence and encourage students to study and pursue careers in the food sector. Selection is based on the highest admission average. No application required. Not tenable with the Board of Governors’ Scholarship, Chancellor’s Scholarship, Devine Family Scholarship, Lincoln Alexander Chancellors Scholarship and President’s Scholarships. If there are insufficient eligible candidates in any one of the academic programs noted above, in any given academic year, the scholarship will be redistributed to eligible candidates from any of the identified academic programs. Preference will be given to eligible candidates in the B.Sc. Food Science program. In order to maintain eligibility, students must remain registered in one of the specified programs.
Donor(s): The Guelph Food Technology Centre (GFTC)
Amount: 17 awards of $14,000 (payable over 4 years of study)

Gordon W. Innes Scholarship [E0140]
Application is not required.
Donor(s): Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.
Qualification(s): Student entering any degree program from Oxford County with the highest admission average.
Amount: 1 award of $1,000

Hardy International Student Scholarship [E0659]
Selection is based on the assessment of the student's admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.
Donor(s): Mrs. Marion Hardy
Qualification(s): Full-time international students (defined as paying the international student tuition and fees) entering any degree program.
Amount: 1 award of $2,000

International Student Entrance Scholarships [E0408]
In support of the University’s strategic direction of internationalism, entrance scholarships are available each Fall semester to the top international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all relevant documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.
Donor(s): University of Guelph
Qualification(s): Students on a “student visa” entering an undergraduate degree program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.
Amount: Several awards ranging in value from $5,500 - $8,500

J.D. MacLachlan Scholarship [E0170]
Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.
Donor(s): The J.D. MacLachlan Trust
Qualification(s): Students entering any degree program at the University of Guelph.
Amount: 1 award of $1,500

Jack and Lillian MacDonald Scholarship [E0379]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average at the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.
Donor(s): Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald
Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).
Amount: 1 award of $900

James MacMillan Memorial Scholarship [E0494]
Established in memory of James MacMillan, his great uncle, by Austin Conway of Toronto. Selection will be based on highest cumulative average. Application is not required.
Donor(s): Austin Conway
Qualification(s): Students entering any program offered by OAC who graduated from an Associate Diploma program from the University of Guelph. Preference will be given to students from Eastern Ontario which includes the counties of Prescott and Russell, Stormont, Dundas and Glengarry, Lanark, Renfrew, Leeds and Grenville, Frontenac and Lennox and Addington; and the City of Ottawa and to students entering the Bachelor of Science in Agriculture or the Bachelor of Commerce in Food and Agricultural Business, or the Bachelor of Arts with a major in Food, Agricultural and Resource Economics (FARE).
Amount: 1 award of $2,500

Lincoln Alexander Chancellor’s Scholarships [E0689]
Established in 2001 in honour of Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This award cannot be held with the President’s Scholarships, the Chancellor’s Scholarships or the Board of Governors’ Scholarships.
Donor(s): Many Donors
Qualification(s): Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.
Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

Mac-FACS-FRAN Alumni Entrance Scholarship - Marketing and Consumer Studies [E0521]
Selection will be based on the highest admission average. This award is not tenable with the President's Scholarship, the Lincoln Alexander Chancellor's Scholarship or the Devine Family Scholarship. Application is not required.
Donor(s): Mac-FACS-FRAN Alumni Association
Qualification(s): Students entering a BComm. program offered by the Department of Marketing and Consumer Studies.
Amount: 1 award of $1,000

McArthur-Humphries Scholarship [E0183]
An equal number of awards are available to students from each county. In the case of insufficient eligible applicants from one county, the awards will be given to eligible applicants from the other county. These scholarships are awarded to students with the highest admission averages. Application is not required.
Donor(s): Wilhelmina McArthur-Humphries Trust Fund
Qualification(s): Students entering any degree program with a minimum 75% admission average from Lanark and Wellington Counties.
Amount: 8 awards of $1,000
The Class of OAC 1968 Scholarship [E1008]
The Class of OAC 1968 established this bursary to celebrate their 50th anniversary. In reflecting on many of their own experiences the class generously supports undergraduate students in any OAC program with demonstrated financial need. Selection will be based on greatest financial need. Students must maintain enrolment in an OAC academic program to maintain their award. Students do not need to continue to demonstrate financial need for all 4 years to continue to receive this award. Apply by April 15 with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) and a summary of agriculture related activities to Student Financial Services (awards@uoguelph.ca).

**Donor(s):** The Class of OAC 1968  
**Qualification(s):** Students entering any OAC degree program who have demonstrated financial need. Preference will be given to students who participated in agriculture-related activities/organizations during their high school career such as Junior Farmers or 4-H.  
**Amount:** 1 award of $10,000 (payable over 8 semesters)

OAC Specialist High Skills Major Program Scholarships (SHSM) [E0832]
The Ontario Association of the Appraisal Institute of Canada established this scholarship to encourage more women to seek employment in the appraisal industry. Selection will be based on the highest admission average. Application is not required.

**Donor(s):** OAC Dean’s Office Liaison Program  
**Qualification(s):** Students entering any OAC undergraduate program with a minimum 75% admission average who are/were registered in the Specialist High Skills Major (SHSM).  
**Amount:** 3 awards of $1,000

Ontario Association of the Appraisal Institute of Canada Scholarship [E1067]
The Ontario Association of the Appraisal Institute of Canada established this scholarship to recognize the leadership of some of their own members in the appraisal industry. Preference will be given to students who have made significant leadership contributions to their career such as Junior Farmers or 4-H.

**Donor(s):** Ontario Association of the Appraisal Institute of Canada  
**Qualification(s):** Female students entering the Bachelor of Commerce program with a major in Real Estate and Housing.  
**Amount:** 1 award of $1,000

President’s Scholarship [E0238]
Established in 1987 in honour of their donors or distinguished members of the University and are considered one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the Chancellors’ Scholarships, the Lincoln Alexander Chancellor’s Scholarships or the Board of Governors’ Scholarships.

**Donor(s):** A number of President’s Scholarships have been named in honour of the following people and/or donors:  
Cecil H. Franklin and Ingrid Franklin  
In honour of Cecil Franklin, former Chair of the Board of Governors and Honorary Fellow of the University, the University of Guelph has named one of these twelve prestigious entrance awards to recognize his financial contributions and volunteer support to the President’s Entrance Scholarship program.  
Charles S. Humphrey  
In memory of Charles S. Humphrey, a former President of Hart Chemical Company Canada Ltd. and long-time friend, the University has named one of these twelve prestigious entrance awards to recognize his financial contribution through his estate to the President’s Entrance Scholarship program.  
Jack R. Longstaffe  
The University of Guelph has named one of these twelve prestigious entrance awards in memory of Jack R. Longstaffe to recognize his financial contribution through his estate to the President’s Entrance Scholarship program.  
Kathleen and Frederick Metcalf  
Mr. and Mrs. F.T. Metcalf of Guelph have endowed this award. After a distinguished career in cable TV, broadcasting and publishing, the late Mr. Metcalf retired as President of Maclean Hunter Ltd. and Chairman of the Board of Maclean Hunter Cable Ltd. He was Honorary Chairman of Maclean Hunter Cable Ltd. and a member of the University of Guelph Heritage Board (1996).  
Rol-land Farms Limited  
Two of the scholarships are endowed by the four shareholders of Rol-land Farms Limited of Blenheim, Ontario, Hank, Peter, Arthur and Eric Vander Pol and their families. The Vander Pol families are generous supporters of a number of University projects and programs.  
Lillian Stewart Usher  
The University of Guelph has named one of these twelve prestigious entrance awards in honour of Lillian Stewart Usher a friend of the University to recognize her financial contribution through her estate to the President’s Entrance Scholarship program.  
**Qualification(s):** Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and/or communities.  
**Amount:** 8 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)
Project Hero Scholarship [E0979]
The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursary) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

Donor(s): University of Guelph
Qualification(s): Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.
Amount: Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

Quinn Memorial Scholarship [E0578]
Established in memory of Ronald J. Quinn (O.A.C. ’35) to an entering O.A.C. international full-time or exchange student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application is not required.
Donor(s): Mrs. Helen Quinn (O.A.C. ’35)
Qualification(s): Entering semester one of an O.A.C. program to an international full-time student or to an international exchange student with a preference to those students from developing nations.
Amount: 1 award of $2,000

Ted Morwick Scholarship [E0796]
Established by Ted Morwick, honorary alumni. The student with the highest admission average will be selected. This award is conditional on maintaining a 80% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify. (i.e. The student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year.) If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with the Chancellors’, President’s or Board of Governors’ Scholarships. No application is necessary.
Donor(s): Mr. Edward (Ted) Morwick
Qualification(s): Students entering any degree program in the College of Arts. Amount: 4 award of $8,000 (payable over four years.)

University of Guelph Entrance Scholarships [E0291]
The value of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student’s financial account in two equal payments in the fall and winter semesters. Application is not required.
Donor(s): University of Guelph
Qualification(s): Students entering their first year of post-secondary studies for the first time with a minimum 85.0% admission average.
Amount: Several awards of $2,000, Several awards of $3,000

W. Penri Morris Memorial Scholarship [E0430]
Established by the family in memory of Penri Morris, who was killed World War II action in 1944 at the age of 21. Penri grew up on the family fruit farm near Forest, Ontario. After graduating from high school, he joined the Royal Canadian Air Force and was attached to the Royal Air Force Bomber Command as a navigator at the time of this death. Awarded to the student with the highest cumulative academic performance above 75% in all courses of the last year in high school study (full-time or equivalent study). Application is not required.
Donor(s): Prof. Rosalina Morris
Qualification(s): Students entering first year of any undergraduate program from North Lambton Secondary School in Forest, Ontario, in their absence, from Lambton County, and their absence, from Ontario.
Amount: 1 award of $1,000

Walter and Halina Slabikowski Scholarship [E0766]
This scholarship was established in memory of Walter and Halina Slabikowski who sent their first generation Canadian born children to university to enrich their lives and provide them with greater opportunities. The award will be given to the student with the highest admission average. The residence deposit must be received by published deadline date. Submit by email to awards@uoguelph.ca your full name, student ID number and a statement attesting to your parents’ place of birth and non participation in post secondary education by April 15th.
Donor(s): Irene Thompson and Slabikowski Family
Qualification(s): Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary studies.
Amount: 1 award of $1,000

Waterloo-Wellington Science & Engineering Fair (WWSEF) Scholarship [E0619]
Established to recognize excellence of the project submissions and encourage students to pursue university studies at the University of Guelph.
Donor(s): University of Guelph
Qualification(s): Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.
Amount: various awards of $1,000

Weiler & Company Entrance Scholarship [E0839]
Selection will be based on demonstrated volunteer experience and extracurricular involvement in your community as evidenced by a resume. This may include, but is not limited to, involvement in school clubs or events and volunteer activities and interest in pursuing a career in accountancy. Apply to Student Financial Services (awards@uoguelph.ca) by April 15 with a resume outlining your extracurricular and volunteer involvement and interest in pursuing a career in accountancy. Preference will be given to a Guelph-Wellington resident.
Donor(s): Weiler & Company
Qualification(s): Students entering the Accounting major of the B.Comm. program.
Amount: 1 award of $1,000

Entrance Scholarships with Financial Need

Bill Klopp Memorial Scholarship [E0150]
Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by April 15. Students should complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).
Donor(s): Ross and Mary Lou Klopp
Qualification(s): Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.
Amount: 1 award of $500
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Amount</th>
<th>Donor(s)</th>
<th>Qualification(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devine Family Scholarships [E4542]</td>
<td></td>
<td>Mr. Peter J. Devine with matching funding through the Ontario Trust for</td>
<td>Students entering a degree program in O.A.C that have graduated with</td>
<td>Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student Support program</td>
<td>financial need and full-time registration; students are required to register</td>
<td>Governors member, with the assistance of the Ontario government's OTSS program.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>for no less than 2.0 credits each semester. Students should complete the online</td>
<td>These scholarships will be given out once every four years, unless the incumbent fails</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as</td>
<td>to qualify. The scholarship is renewed in years two, three and four with continued</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>soon as they receive their Acknowledgement Package from Admission Services (this</td>
<td>demonstrated financial need and full-time registration; students are required to register</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>will come automatically after an application for admissions has been submitted</td>
<td>for no less than 2.0 credits each semester. Students should complete the online</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>by the student) and complete the &quot;Devine Family Scholarship Application&quot;.</td>
<td>Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Deadline to submit the complete application (both parts, the E.N.A.F. and the</td>
<td>Amount: 1 award of $2,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>application) is April 15th of the application year. Scholarship offers will be</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>made in May. This award is not tenable with the President's Scholarships, the</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lincoln Alexander Chancellor's Scholarships or the Chancellors' Scholarships,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>but can be held with all other entrance awards. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td>Devine Interhall Council Entrance Scholarship [E0636]</td>
<td></td>
<td>Interhall Council</td>
<td>Students entering a full-time undergraduate degree program with a minimum</td>
<td>Established by the Interhall Council, the residence student government that programs, advocates and represents resident students to administration and Student Housing Services (<a href="http://www.interhall.ca">www.interhall.ca</a>), to ensure that the residence experience remains accessible to students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (<a href="mailto:awards@uoguelph.ca">awards@uoguelph.ca</a>) by April 15.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>80% admission average. Preference will be given to students who are Black</td>
<td>Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Canadians. Additionally, students must meet the government-mandated terms for</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>receipt of an OTSS award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Amount: 5 awards of $1,000 each (payable over 4 years of study)</td>
<td></td>
</tr>
<tr>
<td>Kenneth O. Hammill-Blount Canada Scholarship</td>
<td></td>
<td>The Blount Foundation, Inc. with matching funding through the Ontario</td>
<td>Students entering a full-time degree program with a minimum 85.0% admission</td>
<td>Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government's OSOTF program. Selection will be based on greatest financial need from the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. ACCESS AWARD.</td>
</tr>
<tr>
<td>[E4356]</td>
<td></td>
<td>Student Opportunities Trust Fund</td>
<td>admission average, residing in residence during first year on the Guelph</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>campus with demonstrated financial need and demonstrated strong leadership ability.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Amount: 5 awards of $1,000 each (payable over 4 years of study)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Amount: 1 award of $12,000 (payable over 4 years)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Amount: 1 award of $9,600 (payable in 8 payments of $1,200)</td>
<td></td>
</tr>
<tr>
<td>L. Norman Gibbins Microbiology Scholarship [E4392]</td>
<td></td>
<td></td>
<td></td>
<td>Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government's OTSS program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Amount: 1 award of $2,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.C. Hamilton-Rob-Land Farms Scholarships</td>
<td></td>
<td></td>
<td></td>
<td>Established by Rol-Land Farms, with the assistance of the Ontario government's OSOTF program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD</td>
</tr>
<tr>
<td>[E4519]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.A.J. Clarke Family Scholarship [E0381]</td>
<td></td>
<td></td>
<td></td>
<td>Paul and Aileen Clarke and their family established the endowment for this entrance scholarship in honour of Paul's father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (<a href="mailto:awards@uoguelph.ca">awards@uoguelph.ca</a>) with a letter outlining extra-curricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not required. This award is not tenable with the President's Scholarships or Lincoln Alexander Chancellor's Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert C. Skipper Scholarship [E0485]</td>
<td></td>
<td></td>
<td></td>
<td>Established by Robert C. Skipper, Diploma in Agriculture 1948 and B.S.A. 1951. Selection will be based on academic standing, participation in extra-curricular activities and involvement in primary production and/or rural community activities. Financial need may also be considered. Apply to Student Financial Services (<a href="mailto:awards@uoguelph.ca">awards@uoguelph.ca</a>) by April 15 with a one-page summary outlining activities and by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.C. Hamilton-Rol-Land Farms Scholarships</td>
<td></td>
<td></td>
<td></td>
<td>Established by Rol-Land Farms, with the assistance of the Ontario government's OSOTF program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD</td>
</tr>
<tr>
<td>[E4519]</td>
<td></td>
<td></td>
<td></td>
<td>Amount: 1 award of $750</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IX. Scholarships and Other Awards, Bachelor of Commerce

Sleeman Brewing Scholarships [E4267]
Established by the Sleeman Brewing and Malting Company, with the assistance of the Ontario government’s OSOTF program. One award alternates between a B.Sc. student in the College of Biological Science and the College of Engineering and Physical Sciences (beginning with C.E.P.S in 2000/2001); one award is available to a B.Comm. student in a major offered by the School of Hospitality, Food and Tourism Management. Selection is by the University Bursary Committee. Students should complete the online Financial Need Assessment Form (N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): The Sleeman Brewing & Malting Company with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time entering students registered in the B.Sc. program in the College of Biological Science or the College of Engineering and Physical Sciences and B.Comm. students, in a major offered by the School of Hospitality, Food and Tourism Management with a minimum admission average of 80% and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,000

Women in Leadership Entrance Scholarship [E1133]
Established by Kelly McCarten, Guelph Alumna BCOMM ’87, former member of the UGAA, and her family. Students complete the online Financial Need Assessment Form (N.A.F.) application once they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and no later than April 15. Selection will be based on the student entering with the highest admission average.

Donor(s): Kelly McCarten

Qualification(s): Female students entering the Bachelor of Commerce program offered by the Gordon S. Lang School of Business and Economics with demonstrated financial need.

Amount: 1 award of $1,000

Entrance Bursaries

Charlebois-Vézéau Family Bursary in Economics [E3073]
Applying with a completed Financial Need Assessment Form for Entrance Awards (N.A.F.) to Student Financial Services by April 15.

Donor(s): Charlebois-Vézéau Family

Qualification(s): Students entering any program offered by the Department of Economics and Finance, Gordon S. Lang School of Business and Economics with demonstrated financial need.

Amount: 1 award of $1,000

Charles McRae Memorial Bursary [E3071]
Established by the Colwyn and Jean Rich Foundation in honour of Mrs. Rich’s late father, Mr. Charles McRae, to honour his achievement in overcoming adversity and achieving great success in business. Selection will be based on greatest financial need. Apply by April 15 using the online Financial Need Assessment Form for Entrance Awards. A new recipient will be selected one every four years, unless a current recipient fails to meet the continued eligibility requirement for the B.Com program. This award is not tenable with other awards over $5,000.

Donor(s): The Colwyn and Jean Rich Foundation

Qualification(s): Students entering the Accounting major of the B.Com with demonstrated financial need, and who are Canadian citizens or permanent residents.

Amount: 1 award of $28,000 (payable over 4 years)

Costco Wholesale Bursary [E3579]
This award was created to assist first-year students in obtaining a post-secondary education in business-related studies. Apply with a completed Financial Need Assessment Form for Entrance Awards (N.A.F.) to Student Financial Services by April 15. Preference given to a student whose permanent address is in Guelph. ACCESS AWARD.

Donor(s): Costco Wholesale with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering any program offered by the Gordon S. Lang School of Business and Economics with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $2,000

Dorothy Wright Entrance Bursary [E3075]
Established in memory of Miss Dorothy Wright, sister, and Miss Dorothy Wright, aunt, of Mr. Ivor Wright, OAC 65A this bursary supports students entering any undergraduate degree program offered by the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form for Entrance Awards (N.A.F.) to Student Financial Services by April 15.

Donor(s): Mr. R. Ivor Wright

Qualification(s): Students entering any OAC degree program who have demonstrated financial need.

Amount: 1 award of $1,000

Elizabeth Maud Hunter (Shier) Bursary [E3575]
This award was created to assist first-year students in obtaining a post secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing a similar situation. Preference given to a student from the County of Brock. Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F.) for Entrance Awards. ACCESS AWARD

Donor(s): The Estate of the Late William Henry “Harry” Hunter with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students entering any degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 3 awards of up to $4,500

First Year Student Residence Bursary [E3066]
These 5 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the on-line Financial Need Assessment Form for Entrance Awards by April 15.

Donor(s): Student Housing Services

Qualification(s): Students entering any degree program with demonstrated financial need.

Amount: 5 awards of $500

Fred Hindle Bursary [E3500]
Awarded in memory of Fred Hindle, O.A.C. ‘38, a long-time generous supporter of his Alma Mater, who at the time of his death, wanted future students to have the same opportunity for an education as he had received. This bursary is awarded with the assistance of the Ontario government’s OSOTF program. This bursary is dependent on continued demonstration of financial need and successful completion of study to advance into the next year. Students should complete the online Financial Need Assessment Form (N.A.F.) as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD.

Donor(s): W. Roy Hindle and family with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Entering O.A.C. degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).

Amount: 1 award of $6,000 (payable over 4 years)

Gord Bennett Memorial and Class of O.A.C. ’43 Bursary [E3515]
The family and friends of R. Gordon Bennett, O.A.C. ’43, a former Deputy Minister of Agriculture, with the assistance of the Ontario government’s OSOTF program, have created this bursary. Apply by April 15 with a letter indicating farming background to Student Financial Services and by completing the online Financial Need Assessment Form (N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student). ACCESS AWARD

Donor(s): The family and friends of R. Gordon Bennett, O.A.C. ’43 with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students entering the BSc(Agr) or BComm (Food and Agricultural Business) programs with demonstrated financial need. Preference will be given to students whose primary family occupation is farming. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $1,000

Last Revision: July 4, 2019
2019-2020 Undergraduate Calendar
**Harvey Graham Bursary [E3030]**

Provided by Harvey Graham (O.A.C. '39). Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a working farm and complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

**Donor(s):** Harvey Graham, O.A.C. ’39  
**Qualification(s):** Students entering any degree program who come from a working farm and who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.

**Amount:** 1 award of $1,500

**International Student Entrance Bursaries [E3043]**

In support of the University’s strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students enter an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar’s Entrance Award Application to Student Financial Services.

**Donor(s):** University of Guelph  
**Qualification(s):** Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.

**Amount:** Several awards ranging in value from $1,000 to $3,000

**John A. Carther Bursary [E3086]**

The late John A. Carther of Cornwall Ontario has created the John A. Carther Bursary to support students from Eastern Ontario. Preference will be given to students from the counties of Stormont, Dundas and Glengarry. Apply to Student Financial Services by April 15th by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).

**Donor(s):** The estate of John A. Carther  
**Qualification(s):** Students entering any program offered by the Ontario Agricultural College with demonstrated financial need.

**Amount:** 1 award of $2,000

**McCranck Family Bursaries [E3580]**

Ron and Doreen McCranck from Scotland Ontario have created these bursaries in memory of his mother and father who farmed near Cobourg Ontario. These bursaries will provide opportunities for students to study agriculture and food at the OAC. Preference will be given to students who have graduated from high school with a Specialist High Skills Majors Program (SHSM). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. ACCESS AWARD.

**Donor(s):** Ron and Doreen McCranck with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students entering any undergraduate degree program offered by OAC with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 5 awards of $3,000

**Real Ontario Farm Insurance Bursary [E3104]**

Apply to Student Financial Services by April 15th by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Selection will be based on financial need.

**Donor(s):** Trillium Mutual Insurance Company  
**Qualification(s):** Students entering the Bachelor of Science in Agriculture program in OAC or the Bachelor of Commerce program with a major in Food and Agricultural Business with demonstrated financial need.

**Amount:** 1 award of $2,000

**Registrar’s Entrance Bursaries [E3034]**

Established by the University of Guelph to support entering undergraduate students with identified financial need. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Bursary, but can be held with all other entrance awards.

**Donor(s):** University of Guelph  
**Qualification(s):** Students entering any degree program with a minimum registration of 1.5 credits and demonstrated financial need.

**Amount:** 500 awards of $4,000

**Robert Arthur Stewart Bursaries [E3272]**

Established in memory of Mrs. Elsa H. Stewart of Pakenham, Ontario. Mr. Stewart graduated from the Ontario Agricultural College in 1933 and Mrs. Stewart from Macdonald Institute in 1932. Applicants for these bursaries should have a good academic record and an active interest in community affairs. A letter from the student and a recommendation from the County agricultural representative or the secondary school principal should be sent to Student Financial Services by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

**Donor(s):** The Estate of Mrs. H. Stewart  
**Qualification(s):** Students from the Ontario Counties of Lanark and Renfrew, and the Regional Municipality of Ottawa-Carleton, entering the 1st semester of a degree program at the University of Guelph.

**Amount:** 14 awards of $1,000

**Steven Jones Memorial Bursaries [E3077]**

Established by Mr. and Mrs. Jones in memory of their late son, Steven Jones (B.Com. ’97). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. Selection will be made on demonstrated financial need.

**Donor(s):** Mr. Harry Jones  
**Qualification(s):** Students entering any degree program with demonstrated financial need.

**Amount:** several awards of $2,000

**University of Guelph Accessibility Bursaries [E3038]**

Established by the University of Guelph to support students with substantial demonstrated financial need. In addition, students will be automatically approved for to participate in the work-study program conditional on the student securing a work-study approved position on campus. Participating in the work-study program is not required to hold this bursary. Payments of this award and the eligibility to participate in the work-study program are conditional upon the recipient receiving funding through their provincial/territorial and/or federal student loan assistance program and registration in a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the Registrar’s Entrance Bursary, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph  
**Qualification(s):** Students entering any degree program with demonstrated financial need and a minimum registration of 1.5 credits.

**Amount:** 200 awards of $14,000 (payable over 4 years) plus Work-study approval

**Aboriginal Student Engagement Scholarship [I0922]**

Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA’s commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status), Métis or Inuit and outline volunteer/leadership experience within the Aboriginal community. The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but not be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

**Donor(s):** Aboriginal Student Association  
**Qualification(s):** Students registered in any program who self-identify as First Nation (status and non-status), Métis or Inuit, who are engaged in the Aboriginal community either in their home community or at the University of Guelph.

**Amount:** 1 award of $1,000
**Allison Kane Memorial Entrepreneurial Prize [C0919]**

Established by her friends and family in memory of Allison Marie Kane, a former University of Guelph student who was a well-respected leader in her community who had a vibrant personality and expressed her entrepreneurial spirit by returning to her family business after graduation. The student who demonstrates the highest level of commitment to community-based entrepreneurial activities including but not limited to working with clients on community-based projects through the Centre for Business and Social Entrepreneurship (CBASE), volunteer experiences, or extra-curricular activities; and who best describes how their experiences with community-based entrepreneurial projects have positively impacted their perspective on community involvement. The level of commitment and description of impact will be weighed equally. Apply to the LANG Awards Committee by April 1 using the online Allison Kane Memorial Entrepreneurial Prize Application Form.

**Donor(s):** Francie Kane  
**Qualification(s):** Students who have previously completed or will be completing MGMT*4050 and/or MGMT*4060 by the end of the Winter semester  
**Amount:** 1 award of $1,000

**Altus Group Scholarship in Real Estate & Housing [10840]**

Selection will be based on demonstrated involvement and/or experience within the real estate and housing industry as evidenced by a resume and letter of recommendation. This experience may include, but is not limited to, employment within the Real Estate and Housing industry, involvement in school clubs or events such as the Real Estate and Housing Student group on campus or the Cornell International Real Estate Case Competition, and volunteer activities. Apply to the Department of Marketing and Consumer Studies Awards Committee by May 15 with a resume and letter of recommendation. Please submit your application by email to mcsaward@uoguelph.ca.

**Donor(s):** Altus Group Scholarship in Real Estate and Housing  
**Qualification(s):** Students registered in the Real Estate and Housing Co-op major of the B.Comm. program who have completed at least 10.0 credits.  
**Amount:** 1 award of $1,000

**Alumni House Call Centre Scholarship [11020]**

Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15th with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

**Donor(s):** Former Employees of the Alumni House Call Centre  
**Qualification(s):** Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.  
**Amount:** 1 award of $1,000

**Alun Joseph Tribute Scholarship [I0756]**

Selection will be based on significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities in the following academic year. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

**Donor(s):** Dr. Alun Joseph Dean of the College of Social and Applied Human Sciences from 2000-2010 & Mrs. Gillian Joseph (CSS BA ’94, FACS MSc ‘96) along with contributing donors to the Alun Joseph Tribute Fund  
**Qualification(s):** Full-time students registered in any program offered by the College of Social and Applied Human Sciences with a minimum 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the following academic year.  
**Amount:** 1 award of $2,000

**Appraisal Institute of Canada Scholarship [I0680]**

The recipient will be selected based on academic achievement in real estate courses in the Real Estate and Housing major. No application required.

**Donor(s):** The Appraisal Institute of Canada  
**Qualification(s):** Students registered in the Real Estate and Housing major of the B.Com. degree program who have completed at least 9.0 credits but no more than 12.5 credits with a minimum 70% in the last two full-time semesters.  
**Amount:** 1 award of $1,000

**Aspen Ridge Homes Real Estate and Housing Scholarship [I0923]**

This scholarship may only be held once. Selection will be based on highest cumulative average. Application is not required.

**Donor(s):** Aspen Ridge Homes Ltd.  
**Qualification(s):** Students registered in the Real Estate and Housing program of the BComm program who have completed a minimum of 14.0 credits and have a minimum 70% cumulative average.  
**Amount:** 1 award of $1,000

**Attila Real Estate Scholarship in Business [I1119]**

Presented by the Gordon S. Lang School of Business and Economics to a BComm student who is graduating in June, or who has graduated in the previous two convocations and who has contributed significantly to the BComm Program. The award will be made on the basis of overall contribution to the Bachelor of Commerce Program through extracurricular leadership activity and academic achievement. Please submit your application by email to lang.awards@uoguelph.ca by April 15 using the BComm Leadership Prize Application Form and include a resume and a detailed list of extracurricular activities indicating the dates of involvement, listed in reverse chronological order, the nature of your involvement, any offices held and your responsibilities. Please divide them into the following categories: Major Activities, Program Activities, College/University Activities (LANG or OAC), Other.

**Donor(s):** Faculty, Staff, Alumni, and Students, Gordon S. Lang School of Business and Economics  
**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations from the BComm program who have demonstrated strong leadership skills and contributions to the program.  
**Amount:** 1 award of a plaque

**Bachelor of Commerce Leadership Prize [C0727]**

Presented by the Gordon S. Lang School of Business and Economics to a BComm student who is graduating in June, or who has graduated in the previous two convocations and who has contributed significantly to the BComm Program. The award will be made on the basis of overall contribution to the Bachelor of Commerce Program through extracurricular leadership activity and academic achievement. Please submit your application by email to lang.awards@uoguelph.ca by April 15 using the BComm Leadership Prize Application Form and include a resume and a detailed list of extracurricular activities indicating the dates of involvement, listed in reverse chronological order, the nature of your involvement, any offices held and your responsibilities. Please divide them into the following categories: Major Activities, Program Activities, College/University Activities (LANG or OAC), Other.

**Donor(s):** Faculty, Staff, Alumni, and Students, Gordon S. Lang School of Business and Economics  
**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations from the BComm program who have demonstrated strong leadership skills and contributions to the program.  
**Amount:** 1 award of a plaque

**Beth Park Memorial Scholarship [I0420]**

The family and friends of Beth Park (FACS ’79) have established a scholarship to foster talent in the area of product development and/or quality management. Please submit your application by email to mcsaward@uoguelph.ca to the Department of Marketing & Consumer Studies by May 15 with a resume and a 500-word statement documenting interest and experience in product development and/or quality management.

**Donor(s):** Holt Renfrew  
**Qualification(s):** Students who have completed 15.0 credits in Marketing Management major in the Department of Marketing and Consumer Studies with a minimum 75% average over the previous 5.0 credits and have demonstrated interest in product development or quality management.  
**Amount:** 2 awards of $1,000

**Big Picture Conferences Scholarship [I0966]**

Big Picture Conferences is dedicated to connecting people through the synergistic production of annual conferences and networking events for the Canadian hospitality industry. The student who has demonstrated dedication to the hotel industry (e.g. the student’s work experience includes different positions and/or various employers within the hotel industry). Current or completed work experience(s) may include, but are not limited to, co-op education placements, full-time employment, part-time employment or summer employment. In the event of a tie, the award will go to the student with the highest cumulative average. Apply to the HFTM Awards Committee (hftmaward@uoguelph.ca) by January 31 with a resume outlining their experience in the hotel industry and a profile describing their hotel-related work experience.

**Donor(s):** Big Picture Conferences  
**Qualification(s):** Students registered in any program offered by the School of Hospitality, Food and Tourism Management who have completed between 4.5 and 15.0 credits and have acquired work experience in the hotel industry.  
**Amount:** 1 award of $1,700
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>[Scholarship Code]</th>
<th>Description</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill Brohman Memorial Scholarship</td>
<td>[I0533]</td>
<td>Established in memory of Bill Brohman, a founding partner of the firm who served on the University of Guelph Board of Governors from 1986-1992. The award winner will be chosen on the basis of academic achievement, involvement in extracurricular activities, and a demonstrated interest in a career in accountancy. Apply to the Department of Management Awards Committee by May 15, including a statement outlining your extracurricular involvement and interest in pursuing a career in accountancy. Please submit your application by email to: <a href="mailto:dom.awards@uoguelph.ca">dom.awards@uoguelph.ca</a>.</td>
<td>Students registered in the Accounting major of the B.Comm. program who have completed between 10.5 and 15.0 credits with a minimum 75% cumulative average.</td>
<td>RLB LLP</td>
<td>1 award of $1,500</td>
</tr>
<tr>
<td>Bill Taylor Memorial Scholarship</td>
<td>[I0280]</td>
<td>Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.</td>
<td>Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or intercollegiate athletics.</td>
<td>AMF Canada Ltd.</td>
<td>1 award of $900</td>
</tr>
<tr>
<td>Blackburn Scholarship</td>
<td>[I0104]</td>
<td>In commemoration of the 125th Anniversary of the Ontario Agricultural College, Dr. D.J. Blackburn, a retired faculty member of the former Rural Extension Studies program and former Director of the Associate Diploma Program has established this scholarship. Apply by letter, citing athletic contributions, to the O.A.C. Awards Committee (<a href="mailto:oacaward@uoguelph.ca">oacaward@uoguelph.ca</a>) by May 15. Please include our name, student ID number and the name of the award on your application.</td>
<td>O.A.C. degree or diploma student who has participated in intercollegiate athletics and maintained a minimum cumulative average of 70% while registered at Guelph. Athletic excellence and leadership will be used to determine the recipient. Students who have completed up to 3 years of study are eligible.</td>
<td>D.J. Blackburn</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Bridge Builder Scholarship</td>
<td>[I1050]</td>
<td>The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Apply to Student Financial Services by May 15th with a one page letter outlining the volunteer activities that lead to social connections, breaking down barriers, and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people through one or more of the following: Civic engagement by facilitating community engagement, social integration and volunteerism to promote inclusion for immigrant and ethno-cultural communities; Social connections by promoting social connections and employment networking, including programs that reduce barriers and increase support for vulnerable groups; Education and empowerment by promoting intercultural understanding and break down barriers to participation in community life and decision-making. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.</td>
<td>Students registered in any program who, through volunteer activities in the local community, have demonstrated a passion and commitment for building bridges in one or more of the following ways: facilitating social connections; breaking down barriers; and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people.</td>
<td>Muslim Society of Guelph</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>C.W. Riley Prize</td>
<td>[I0246]</td>
<td>The C.W. Riley Prize was established by a number of his friends and associates. Application is not required.</td>
<td>Student who, on graduation from Food Agriculture and Resource Economics, Agricultural Business or Resource Economics and Rural Development major, attains the highest proficiency in the area subjects.</td>
<td>Friends and associates of C.W. Riley</td>
<td>1 award of $250</td>
</tr>
<tr>
<td>Cambrian Solutions Inc. Business Scholarship</td>
<td>[I1085]</td>
<td>Cambrian Solutions is a Canadian company that is constantly sourcing innovative products that meet the demands of North America’s dynamic industries while partnering with world class ingredient and chemical manufacturers to bring them optimized sales portfolios. Students will be selected based on the breadth of the extracurricular and entrepreneurial activities in which they are participated, with preference given to those who have demonstrated leadership in those activities. Students apply to the LANG awards committee by May 15th with a copy of their resume and a detailed list of extracurricular and entrepreneurial activities indicating the dates of involvement, listed in reverse chronological order, the nature of your involvement, any offices held and your responsibilities.</td>
<td>Students registered with the Gordon S. Lang School of Business and Economics, in the Marketing Management major who have a minimum of 70% cumulative average, have completed a minimum 15.0 credits and who have participated in extracurricular and entrepreneurial activities such as (but not limited to): student clubs/ societies, have run a business, worked in sales, volunteer work, intramurals, and social groups.</td>
<td>Cambrian Solutions Inc.</td>
<td>1 award of $4,000</td>
</tr>
<tr>
<td>Canadian Agri-Marketing Association (Ontario) Scholarship</td>
<td>[I0541]</td>
<td>Selection will be based on a combination of academic achievement and greatest demonstrated interest in agri-marketing. Apply to the OAC Awards Office by May 15 with a summary of participation in the CAMA Student Chapter and/or involvement in agri-marketing initiatives as well as a letter of recommendation from a faculty member. This award may only be held once.</td>
<td>Students registered in any program offered by OAC who have completed a minimum of 10.0 credits with a minimum 70% cumulative average and are active members of the CAMA Student Chapter and/or involved in agri-marketing initiatives.</td>
<td>Canadian Agri-Marketing Association (Ontario)</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Carolyn Oke Langill Community Outreach Scholarship</td>
<td>[I1043]</td>
<td>Students should apply by May 15 with a 500 word letter which describes previous volunteer work in the first two years of university and their interest in children and families. Selection will be based on the student’s commitment to community engagement and volunteerism as demonstrated by a 500 word letter describing previous volunteer work in the first two years of university and an interest in children and families. Applicants may be involved in a project at a local, national or international level and must provide a budget for the intended work or travel. Travel must be curriculum approved.</td>
<td>Students registered in any program offered by the College of Social and Applied Human Sciences who have completed between 10.0 and 15.0 credits and who are participating in curriculum-embedded experiential learning in the following academic year.</td>
<td>Carolyn Oke Langill, FACSA alumna of 1980</td>
<td>1 award of $2,500</td>
</tr>
<tr>
<td>Central Canadian Chapter of The Society of Industrial and Office REALTORS® Scholarship</td>
<td>[I0673]</td>
<td>The recipient will be selected based on academic achievement and interest in contributions to the real estate and housing profession as evidenced by volunteer or paid work. Please submit your application by email to <a href="mailto:mcsaward@uoguelph.ca">mcsaward@uoguelph.ca</a> by May 15 to the Department of Marketing and Consumer Studies with a resume demonstrating interest or contributions to the real estate and housing profession. Scholarship recipient will be invited to attend the SIOR annual early December meeting for award presentation.</td>
<td>Students registered in the Real Estate and Housing major of the BComm program who have completed a minimum of 10.0 credits and who have a demonstrated interest in or made contributions to the real estate and housing profession.</td>
<td>Central Canadian Chapter of the Society of Industrial and Office REALTORS® (SIOR)</td>
<td>Various awards ranging in values from $1,000 to $3,000</td>
</tr>
<tr>
<td>CFRU Volunteer Scholarship</td>
<td>[I0215]</td>
<td>The award is presented to the student who has made the most significant contribution to the operation and goals of CFRU. Apply to Student Financial Services by May 15 with a letter describing the contributions made as a volunteer with CFRU and how those contributions have supported the operation and furthered the goals of CFRU.</td>
<td>Students registered in any program with a minimum cumulative average of 70% who have volunteered at CFRU for at least one year.</td>
<td>CFRU Alumni</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>
IX. Scholarships and Other Awards, Bachelor of Commerce

Charles McGowan Memorial Prize [C0187]
Established in memory of the late Lieutenant Charles McGowan. Application is not required.
**Donor(s):** Charles McGowan Memorial Fund
**Qualification(s):** Outstanding graduating student in an O.A.C. degree program.
**Amount:** 1 award of $200

Chartered Professional Accountants of Ontario Leadership Scholarships [10826]
Selection of the award winner will be based on academic performance and demonstrated leadership ability and potential as evidenced through positions held, extracurricular activities, involvement on campus/in school/in the community. Apply to the Department of Management Awards Committee by May 15 with a resume and 500 word statement outlining their expressed intent to pursue a CA designation, Certificate in Leadership and the importance of pursing leadership training as a part of their business education and a detailed description of their leadership activities.
**Donor(s):** Chartered Professional Accountants of Ontario
**Qualification(s):** Students registered in the Bachelor of Commerce program intending to pursue both a Chartered Professional Accountant (CPA) designation as well as a Certificate in Leadership. Students must have completed at least 15.0 course credits, with a minimum cumulative average of 75%, and successfully completed HROB*2010 (Foundations of Leadership).
**Amount:** 2 awards of $2,500

Cheryl Somerville Memorial Leadership Scholarship [10647]
Established by family and friends in memory of the late Cheryl Somerville. OAC'96, to recognize the outstanding and significant leadership contributions of students. Selection will be based on leadership contributions to the college and/or university during the first three semesters; community, 4H and Junior Farmer activities will also be considered.
Application is by nomination. Nominations will be made by Student Federation of the O.A.C. and must include a brief resume of the nominee and a statement of his/her leadership contributions along with an outline of the impact of those contributions to student and community life. Nominations are due in the OAC Awards Office by December 1st.
**Donor(s):** Family and Friends of Cheryl Somerville
**Qualification(s):** Students registered in the B.Sc.(Ag.) or the B.Comm. Agricultural Business program who have completed 7.5 credits with a 70% minimum cumulative average.
**Amount:** 1 award of $1,000

Christina Victoria Kenny Memorial Scholarship [11018]
The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.
**Donor(s):** Family and Friends of Vikki Kenny
**Qualification(s):** Students registered in any degree program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.
**Amount:** 1 award of $1,000

Class of ’51 O.A.C. Leadership Prizes [C0063]
Established by Year ’51 O.A.C., on the occasion of its 45th anniversary. Selection will be based on significant demonstrated leadership in College and/or University extracurricular activities. Apply to the OAC Awards office (oacaward@uoguelph.ca) by April 1 with a letter outlining your demonstrated leadership in College and/or University extracurricular activities. Please include our name, student ID number and the name of the award on your application.
**Donor(s):** Year ’51 O.A.C.
**Qualification(s):** Students who have graduated or are graduating in the previous Fall or Winter semesters from any degree or associate diploma program in the OAC, Guelph campus.
**Amount:** 5 awards of $3,000

Class of ’67 O.A.C. Centennial Scholarship [10067]
Apply by May 15 to the OAC Awards office (oacaward@uoguelph.ca) with a letter outlining participation in extracurricular activities in all branches of college life. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.
**Donor(s):** Class of O.A.C. ’67
**Qualification(s):** Student majoring in an O.A.C. department who through activity in all branches of college life as well as scholastic achievement has made an outstanding contribution to the University.
**Amount:** 2 awards of $2,000

Class of 1970 Scholarship [I0424]
Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.
**Donor(s):** Class 1970: 25th Reunion Gift
**Qualification(s):** Outstanding student in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Deans’ Honours List.
**Amount:** 1 award of $1,400

Class of Mac 1964 Scholarship [I1033]
Apply to the CSAHS Awards Committee by May 15th with a one page letter outlining your experiential learning opportunity and the impact the experience had on your academic studies. Selection will be based on the student who best describes how their experiential learning positively impacted their academic studies. Preference will be given to students who best explain how their experiential learning has directly benefited their area of study within CSAHS; highest cumulative average will be used in the case of a tie.
**Donor(s):** The Class of Mac 1964
**Qualification(s):** Students registered in the College of Social and Applied Human Sciences with a minimum cumulative average of 75% and a minimum of 10.0 credits who have participated in experiential learning including curriculum-embedded experiential learning, placements, field courses and international travel opportunities within the last 3 semesters.
**Amount:** 1 award of $1,500

Clayton and Dorothy Switzer Scholarships [I0276]
Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter outlining how you have demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.
**Donor(s):** Clayton and Dorothy Switzer
**Qualification(s):** Students registered in a degree program offered by O.A.C. with a minimum of 10.0 credits completed, at least a 70% cumulative average and has demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal.
**Amount:** 1 award of $2,500

Coldwell Banker Neumann Real Estate Scholarship [I0916]
Selection will be based on displaying leadership in extracurricular activities. Preference will be given to a student currently playing on the Gryphons Women’s Varsity Hockey Team or on a women’s hockey team. Apply to Marketing and Consumer Studies Awards Committee by May 15 with a resume outlining leadership skills obtained through involvement in extracurricular activities and, if applicable, provide a letter from the coach of a women’s hockey team confirming membership.
**Donor(s):** Coldwell Banker Neumann Real Estate
**Qualification(s):** Students registered in the Real Estate and Housing major of the B.Comm. program with demonstrated involvement in extracurricular activities.
**Amount:** 1 award of $1,500

Collins Barrow Scholarship [I0040]
Offered by Collins Barrow, a national firm of Chartered Professional Accountants. Selection will be based on the student who has achieved the highest grade in the course ACCT*3330, Intermediate Financial Accounting, in the past academic year. In the event of a tie, the award will go to the student with the highest cumulative average. Application is not required.
**Donor(s):** Collins Barrow - Wellington Dufferin District
**Qualification(s):** Students who have successfully completed the course ACCT*3330, Intermediate Accounting.
**Amount:** 1 award of $1,000

Last Revision: July 4, 2019
2019-2020 Undergraduate Calendar
CPA Ontario Scholarships [I0788]
Apply by May 15 to the LANG Awards Committee with a 500 word statement which includes a description of the positive impact of completed non-accounting electives toward a career as a CPA and the intent to pursue a CPA designation post-graduation. Selection will be made on cumulative average and the strength of the 500 word statement. Apply to the Department of Management Awards Committee including: transcript and a 500 word statement. Statement should outline why non-accounting electives will benefit their career in accounting after graduation. Selection should also include an intent to pursue a CPA designation within 2 years of graduation, if applicable. Please submit your application by email to: dom.awards@uoguelph.ca.

**Donor(s):** Chartered Professional Accountants of Ontario

**Qualification(s):** Students registered in the Accounting major of the Bachelor of Commerce program with a minimum cumulative average of 75% who have completed 15.0 credits including three electives in a non-accounting area.

**Amount:** 1 award of $1,000

CSAHS SA Student Leader Scholarship [I0864]
Selection will be based on contributions to college-related activities. Apply to the CSAHS Awards Committee by May 15 with a one page letter outlining volunteer experience within the college.

**Donor(s):** CSAHS Student Alliance

**Qualification(s):** Full-time students registered in any program offered by the College of Social and Applied Human Sciences who have completed a minimum of 8.0 credits and can demonstrate involvement in college-related volunteer activities.

**Amount:** 1 award of $1,000

CSS Alumni Heritage Scholarship [I0616]
Established to recognize the valuable contributions made by CSS alumni and CSS Alumni Association to the life and vitality of the University. These scholarships will be awarded to the student with the highest cumulative program average. This scholarship may be held only once. Application is not required.

**Donor(s):** CSS Alumni Heritage and the Dean of CSAHS

**Qualification(s):** Students registered in any Economics major or the Marketing Management major, who have completed between 7.5 and 12.5 credits, and are registered in the same majors for the subsequent fall semester with a minimum cumulative average of 80.0%.

**Amount:** 2 awards of $1,000

Dairy Challenge Prize [I0811]
Supported by The Madsen Dairy Cattle Research Fund, the Dairy Challenge Prize will be awarded to students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercolligate Dairy Challenge. No application is required.

**Donor(s):** Madsen Dairy Cattle Research Fund

**Qualification(s):** Students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercolligate Dairy Challenge.

**Amount:** several awards up to $2000

Dan and Jodi Morgan - Green Tech Bug Heat Scholarship [I1012]
Green Tech Bug Heat Toronto Bed Bug Exterminator, a company run by Dan and BA Economics '91 alumna Jodi Morgan, is dedicated to sound environmental stewardship and is proud to offer this award to the student with the highest final grade in ECON*2100 "Economic Growth and Environmental Quality. Application is not required.

**Donor(s):** Royal Forest Pest Services Inc.

**Qualification(s):** Students registered in a major offered by LANG who have completed ECON*2100 in the fall semester.

**Amount:** 1 award of $1,000

David F. Boyes Apiculture Scholarship [I0031]
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application is not required.

**Donor(s):** The Apiculture Club

**Qualification(s):** Student registered in the Fall semester who achieves high academic standing in Introductory Apiculture ( ENVB*2210 ) in the previous year, demonstrates an interest in apiculture and who has participated in extracurricular activities.

**Amount:** 1 award of $2000

Dawn Morris Memorial Prize [C0361]
Offered in memory of Dawn Morris, who spent 35 years in farm show business and was former Manager of the Canadian International Farm Equipment Show in Toronto. Selection will be based on highest cumulative average with preference given to students who demonstrate extracurricular activity or employment in the field of agricultural marketing. Apply by April 1 by submitting a letter and your resume to the OAC Awards Office (oacaward@uoguelph.ca) outlining your involvement in extracurricular activities. Please include the award name and award ID number in the subject line of your email and on your application. Students who are graduating in June, or who have graduated in the previous two convocations from the BComm program with a major in Food and Agricultural Business and have a minimum 75% cumulative average with demonstrated involvement in extracurricular activities.

**Donor(s):** The Family of Dawn Morris

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations from the BComm program with a major in Food and Agricultural Business and have a minimum 75% cumulative average with demonstrated involvement in extracurricular activities.

**Amount:** 1 award of $1,000

Deans’ Scholarships [I0323]
This award was established by the Board of Governors’ in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.

**Donor(s):** Board of Governors

**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.

**Amount:** 150 awards of $2,000

Don Posterski Memorial Travel Grant [T1105]
Established in memory of Don Posterski - a trusted advisor and friend to the Barrett Family Foundation. This travel grant recognizes Don Posterski’s role and leadership in helping establish the sustainability partnership between the University and The Barrett Family Foundation. Mr. Posterski was a national Christian leader and had a distinguished career at World Vision Canada.

**Donor(s):** Alumni Affairs & Development - University of Guelph

**Qualification(s):** Students registered in International Development (CSAHS) who have completed at least 10.0 credits with a minimum cumulative average of 70% and who demonstrates the desire and aptitude to help build capacity and address social issues in international communities and are participating in any course related international travel. Apply to CSAHS Awards committee with a letter outlining proposed travel plans and academic purpose accompanied by a letter of support from a faculty member or student in and an overall travel budget.

**Amount:** 1 award of $1,000

Donald I. Broadfoot Scholarship [I0994]
This scholarship was created in honour of Donald Broadfoot who graduated from OAC in 1950. He worked for Hy-Line Poultry (a division of Pioneer Corn Company) in the US and Canada from 1950-1974 where he conducted disease and genetic research, and during that time did a lot of work which led up to effective treatments for various diseases in poultry. Apply by May 15 to the OAC Awards Committee (oacaward@uoguelph.ca) with a letter (no more than 2 pages) outlining your interest in poultry science. Please include relevant work experience; relevant volunteer experience and/or relevant research projects that demonstrate this interest. Please include the name of the award and the award ID number in the subject line of your email as well as on your application. Please include your student number on your application. Selection will be based on the strongest demonstrated interest measured by; work experience; volunteer experience and/or projects. Students may only receive this award once.

**Donor(s):** Doug Broadfoot

**Qualification(s):** Students registered in any program in OAC who have completed a minimum of 10.0 credits at the time of application and who demonstrate an interest in poultry science.

**Amount:** 1 award of $500
IX. Scholarships and Other Awards, Bachelor of Commerce

Dr. R. J. Hilton Memorial Scholarship [I0678]
Established to honour the accomplishments of Dr. Hilton as the Chair, Horticulture Science, University of Guelph, first Director of the Arboretum and President/Chair of the Royal Botanical Gardens. Selection will be based on the highest cumulative average, demonstrated involvement in horticultural activities and involvement in academic club activities. Summer related work experience will also be considered. Preference will be given to students registered in B.Sc.(Agr) CHATS and B.Sc. Plant Science. Apply by May 15 to the OAC Awards Office (oaaward@uoguelph.ca) with a letter outlining the plant agriculture course(s) and/or involvement in horticultural activities and summer related work experience or information about involvement in academic club activities. Please include our name, student ID number and the name of the award on your application.

Donor(s): Robert E. Hilton

Amount: 1 award of $1,000

Dr. Ralph and Joanne Watt Scholarship [I1080]
Apply to the OAC Awards Committee (oaaward@uoguelph.ca) by May 15 with a resume and a letter (no more than two page) outlining your career interests and your employment and/or extracurricular activities that demonstrate your interest in becoming an equine veterinarian and your involvement in agricultural activities. Please include the Award Name and ID in the subject line of your email and on all pieces of your application. Please also include your student ID on your application.

Donor(s): Sandy Watt

Amount: 1 award of $1,000

Economical Insurance Scholarships [I1069]
Apply to the LANG Awards Committee (lang.awards@uoguelph.ca) by May 15 with a one-page letter outlining the individual’s volunteer involvement or employment in the insurance industry. The scholarship will be awarded to the student with the highest cumulative average.

Donor(s): Economical Insurance

Amount: 2 awards of $1,000

Eglington Family Scholarship [I1030]
Mark Eglington, a BComm. MEIF graduate of the University of Guelph, and his family, provide the this scholarship. The award will be given to the student with the highest cumulative average across 3000 and 4000 level courses oriented towards internationalism and or housing markets. No application is required.

Donor(s): Mark Eglington and Family

Amount: 1 award of $1,000

Embree & Co. LLP Scholarship in Accounting [I0902]
The recipient is selected on the basis of demonstrated leadership experience which may include, but is not limited to, employment within the Accounting industry, co-operative educational placements, involvement in school clubs, sports teams or events, and extracurricular volunteer activities. Please submit your application by email to: dom.awards@uoguelph.ca.

Donor(s): Embree & Co. LLP

Amount: 1 award of $2,500

---

Dorothy Shantz Memorial Scholarship - Fourth Year [I0256]
Established by the Canadian Hospitality Foundation. Please submit your application by email to hftaward@uoguelph.ca to the HFTM Awards Committee by January 31 using the standard HFTM scholarship application form.

Donor(s): Canadian Hospitality Foundation

Qualification(s): Student registered in a major offered by the School of Hospitality, Food and Tourism Management who has completed at least 15.00 credits (normally in the eighth semester) with a minimum 70% cumulative average and who shows enthusiasm for the foodservice industry. The recipient must have demonstrated leadership ability by holding an executive position on a student organization of the School of Hospitality, Food and Tourism Management.

Amount: 1 award of $800, 1 Engraved Plaque

Dorothy Shantz Memorial Scholarship - Third Year [I0496]
Established by the Canadian Hospitality Foundation. Please submit your application by email to hftaward@uoguelph.ca. to the HFTM Awards Committee by January 31 using the standard HFTM scholarship application form.

Donor(s): Canadian Hospitality Foundation

Qualification(s): Student registered in a major offered by the School of Hospitality, Food and Tourism Management who has completed at least 11.00 credits but no more than 14.50 credits (normally in the sixth semester) with at least a 70% average in the last two full-time equivalent semesters and who shows enthusiasm for the foodservice industry. The recipient must have demonstrated leadership ability by holding an executive position on a student organization of the School of Hospitality, Food and Tourism Management.

Amount: 1 award of $800, 1 Engraved plaque

Douglas M. Robinson Memorial Scholarship for Excellence in Communications [I1049]
Established in memory of Douglas Robinson, OAC’53. Doug spent his career promoting and creating awareness of agriculture. This scholarship recognizes his leadership in agriculture communications and his service to both the University and agricultural communities. Apply with a resume to the OAC Awards Committee (oaaward@uoguelph.ca) by May 15. Selection will be based on demonstrated leadership promoting and creating awareness of agriculture through extracurricular activity including student competitions, university clubs, events and student government.

Donor(s): Mrs Marilyn Robinson Murray

Qualification(s): Students registered in any degree program offered by the Ontario Agriculture College with a minimum of 10.00 credits.

Amount: 1 award of $1,000

Dr. James (Jim) Atkinson Scholarship [I1025]
This award has been created through the generous contributions of many alumni and friends to recognize Dr. James (Jim) Atkinson’s influence at Guelph. As coach for over thirty years on both the men’s and women’s teams, as well as a respected faculty in the department of Animal and Poultry Science, Jim has had an impact on and off the field. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

Donor(s): Alumni and Friends of Dr. James (Jim) Atkinson

Qualification(s): One male rugby player and one female rugby player who is registered in any undergraduate program and who has achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student enrolled in the Ontario Agricultural College.

Amount: 2 awards of $1,000

Dr. John E. Kean Scholarship [I1047]
Established by the Canadian Standards Association as a gift on the occasion of Dr. Kean’s retirement as President and CEO of the Canadian Standards Association (now CSA International). Apply by May 15th to the Department of Marketing and Consumer Studies Awards Committee using the Undergraduate In-course Scholarship Application, including a letter highlighting interest in management, consumer interests, and/or sustainability of Canadian business as well as leadership potential. Selection will be based on academic achievement and the submitted letter.

Donor(s): CSA International

Qualification(s): Students registered in the Marketing Management major of the B.Com program who have completed at least 10.00 credits but no more than 15.00 credits.

Amount: 1 award of $1,000

Last Revision: July 4, 2019
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairmont Hotels and Resorts Scholarship</td>
<td>2 awards of $1,000</td>
</tr>
<tr>
<td>Food Dudes Inc. Scholarships</td>
<td>2 awards of $1,000</td>
</tr>
<tr>
<td>Frances M. Streton Scholarship</td>
<td>1 award of $5,000</td>
</tr>
<tr>
<td>Frank Hughes Memorial Scholarship</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Fred Lai Yin Kan Memorial Scholarship</td>
<td>1 award of $1,500</td>
</tr>
<tr>
<td>G.H. Mann Food Service Scholarship</td>
<td>1 award of $300</td>
</tr>
<tr>
<td>George A. Gray O.A.C. ’51 Varsity Scholarships</td>
<td>2 awards of $1,250</td>
</tr>
<tr>
<td>George D. Bedell Prize</td>
<td>1 award of a Plaque</td>
</tr>
<tr>
<td>Glenn Webb Education Scholarship/ GROWMARK Foundation</td>
<td>2 awards of $1,000</td>
</tr>
<tr>
<td>Gonder Family Scholarship</td>
<td>1 award of $750</td>
</tr>
</tbody>
</table>

### Fairmont Hotels and Resorts Scholarship [I0833]
Fairmont Hotels and Resorts are committed to the values of respect, integrity, teamwork, and empowerment, as reflected in its commitment to supporting student learning and professional development. Fairmont Hotels and Resorts Scholarships support upper year students who intend to pursue a career in the hotel hospitality field. Selection will be based on the student who best demonstrates how the values of respect, integrity, teamwork and empowerment are reflected in their education and experience to date.

**Donor(s):** Fairmont Hotels and Resorts  
**Qualification(s):** Students registered in any program offered by the School of Hospitality, Food and Tourism Management who have completed at least 10.0 credits and have completed hospitality-related employment, co-op education placements or extracurricular or volunteer activities.

### G.H. Mann Food Service Scholarship [I0174]
Preference will be given to a student who has contributed to the ongoing success of the Hospitality Services Department of the University. Please submit your application by email to hftaward@uoguelph.ca the HFTM Awards Committee by January 31 by using the standard HFTM scholarship application form and include a statement of up to 500 words explaining interest in the foodservice industry.

**Donor(s):** G.H. Mann Memorial Fund and M. Mann of Guelph  
**Qualification(s):** Student who is registered in semester 8 of the B.Comm. program, in a major offered by the School of Hospitality, Food and Tourism Management, and has a minimum cumulative average of 70%. In addition, the recipient will have an interest in, and have participated in, activities conducive to a career in the foodservice industry.

**Amount:** 1 award of $300

### Gonder Family Scholarship [I0552]
Established in recognition of student abilities and the varying challenges of undergraduate study. The recipient will be chosen on the basis of academic achievement with a preference to students enrolled in any LANG major of the B.Comm. program. Application is not required.

**Donor(s):** Dr. John and Mrs. Katherine Gonder  
**Qualification(s):** All students in the LANG who have completed between 10.0 and 15.0 course credits with a minimum 70% cumulative average, and who have been identified with a learning disability through the University of Guelph’s Student Accessibility Services.

**Amount:** 1 award of $750
Gonder Family Student Accessibility Services Volunteer Scholarship [I0563]
In recognition of the many students who volunteer their time and talents to assist their colleagues registered with the Student Accessibility Services (SAS) and to encourage others to do so, Dr. John and Mrs. Katherine Gonder provide this award to a student who has volunteered in the SAS. The award will be made on the basis of the volunteer activities undertaken by the student at the SAS, one letter of reference, and a personal statement that outlines the time commitment and types of volunteer activities undertaken as well as an indication of how this was a valuable and rewarding volunteer experience. Apply by January 15th to the SAS (c/o Advisor to Students with Disabilities) by submitting above documentation.

Donor(s): Dr. John and Mrs. Katherine Gonder
Qualification(s): All students registered in the College of Social and Applied Human Sciences (CSAHS) that have completed between 10.0 and 15.0 course credits with a minimum 70% cumulative average, and have been involved as volunteers with the SAS.
Amount: 1 award of $750

Gordon Food Service Active Lifestyle Scholarships [I1104]
Gordon Food Service is the largest privately held, family managed food service company in North America, focused on establishing business alliances for over 120 years. Gordon Food Service is committed to the future of their company, which begins with exceptional people like you! Students apply by May 15th to the LANG awards committee with a 1-page letter describing the length and depth of their physically active lifestyle and experience or interest in logistics and/or operations. Hiking, biking, skiing, sledding, soccer, running, weight lifting, rock climbing and intramural sports are examples (but not exclusive) to an active lifestyle. The recipients will be selected from a pool of applicants having met the criteria based on the highest grade in FARE 3310 “Operations Management,” or HTM 3120 “Service Operation Analysis.” In the event of a tie, the student with the highest cumulative average will be selected.

Donor(s): Gordon Food Service
Qualification(s): Students registered in any major offered by the Gordon S. Lang School of Business and Economics, who live a physically active lifestyle, completed FARE*3310 “Operations Management,” or HTM*3120 “Service Operation Analysis”, have experience or interest in operations and/or logistics, and have a minimum of 70% cumulative average.
Amount: 2 awards of $2,500

Governor General’s Medal [C0044]
Established by the Office of the Governor General of Canada. Application is not required.

Donor(s): The Chancellery
Qualification(s): Restricted to those undergraduate students in any degree program who are graduating in June, or who have graduated in the previous two convocations, with the highest cumulative average.
Amount: 2 awards of a Silver medal each

Greater Toronto Hotel Association Scholarship [I0573]
Each January, the HFTM Awards Committee will invite the students with the top five grades in the previous winter semester’s offering of HTM*2100 to submit a statement of up to 500 words explaining their interest in the lodging industry. The recipient will be selected based on academic performance and the statement of interest.

Donor(s): Greater Toronto Hotel Association
Qualification(s): Students in a major of the B.Comm. degree program offered by the School of Hospitality, Food and Tourism Management and have completed HTM*2100 (Lodging Operations).
Amount: 1 award of $1,000

Guelph & District Association of Realtors Scholarship [I1034]
The student with the highest cumulative average will receive the award. Application is not required.

Donor(s): Guelph & District Association of Realtors
Qualification(s): Students registered in the Real Estate and Housing Management major who have completed a minimum of 2.5 credits and no more than 7.5 credits. Preference given to students from Wellington County.
Amount: 1 award of $1,000

HFA HTM Alumni Association Scholarship [I0501]
Established by the School's Alumni Association in recognition of student involvement in the life of the School of Hospitality, Food and Tourism Management and/or the University. Please submit your application by email to hftaward@uoguelph.ca by January 31 using the standard HFTM scholarship application form to the HFTM Awards Committee.

Donor(s): The HFA/HTM Alumni Association
Qualification(s): Awarded to students registered in the B.Comm. program, in a major offered by the School of Hospitality, Food and Tourism Management. One scholarship will be awarded to a student who has completed at least 7.00 credits (but no more than 10.50 credits) and the second award will be given to a student who has completed at least 11.00 credits (but no more than 14.50 credits). Applicants must have at least a 70% average in the last two full-time equivalent semesters. The recipient must have participated in extracurricular activities at the University of Guelph.
Amount: 2 awards of $1,000

HFA/HTM Alumni Association Recognition of Achievement Prize [C0351]
Established in recognition of student involvement in the life of the School of Hospitality, Food and Tourism Management and/or the University. Selection will be based on the number of extracurricular activities and the level of involvement. Please submit your application by email to hftaward@uoguelph.ca by January 31, to the HFTM Awards Committee by using the standard HFTM scholarship application form with a resume and detailed list of extracurricular activities.

Donor(s): The HFA/HTM Alumni Association
Qualification(s): A graduating student in a major offered by the School of Hospitality, Food and Tourism Management who has at least a 70% average and involvement in extra-curricular activities.
Amount: 1 award of $500 and a framed certificate

Harry Barrett Memorial Scholarship [I1046]
This award was established through a gift from the estate of Mr. Harry Barrett, a graduate of OAC from 1949. Selection will be based on the highest cumulative average. Apply by May 15th to Student Finance with a written explanation of the planned experiential learning opportunity. If there are no applications by May 15th, the scholarship will be given to the student with the highest grade in ZOO*4920 in the previous Fall offering.

Donor(s): The Estate of Harry Barrett
Qualification(s): Students registered in any program who will be participating in field work related to bird studies. Preference will be given to students interested in research and/or study under the Bird Studies Canada program at their headquarters in Port Rowan, Ontario.
Amount: 1 award of $1,500

HFTMSA Leader in Industry Scholarship [I0939]
The Hospitality, Food & Tourism Management Student’ Association (HFTMSA) has established this scholarship to recognize a full-time student who can demonstrate involvement in College and/or industry-related volunteer/leadership activities which may include but are not limited to holding a council position on HFTMSA executive, CBESA executive, Board of Directors, Student Senator, Accredited Student Organizations (ASO) or a LANG affiliate club. Please submit your application by email to hftaward@uoguelph.ca the Hospitality, Food & Tourism Management Awards Committee by May 15 with a one page letter of intent outlining volunteer and leadership experiences/activities within the College and/or contributing experience to the Hospitality, Food & Tourism Industry. Selection will be based on significant volunteer/leadership involvement in the hospitality industry and then on significant volunteer/leadership contributions to College activities.

Donor(s): Hospitality, Food & Tourism Management Student’s Association
Qualification(s): Students registered in any major offered by the School of Hospitality, Food & Tourism Management who have completed a minimum of 15.0 credits and can demonstrate involvement in College and/or industry-related volunteer/leadership activities.
Amount: 1 award of $1,000
Homestead Land Holdings Prize [I0629]
This scholarship recipient will be selected based on academic performance and demonstrated interest and experience in the residential property management field. Please submit your application by email to mcsaward@uoguelph.ca to the Marketing & Consumer Studies Awards Committee by May 15 with a statement of up to 500 words explaining your interest and experience in the residential property management field.
**Donor(s):** Homestead Land Holdings Ltd.
**Qualification(s):** Students registered in the Real Estate and Housing major of the B.Com. degree program offered by the Gordon S. Lang School of Business and Economics who have completed at least 14.0 credits but no more than 17.5 credits with a minimum 70% in the last two full-time semesters.
**Amount:** 1 award of $2,000

International Undergraduate Scholarship [I0577]
Established through a student referendum approved by the undergraduate student body, to recognize international students' academic merit along with involvement/leadership activities during their enrollment at the University of Guelph. Apply to Student Financial Services, by May 15, with a letter indicating involvement/extracurricular activity since entry to the University. This award can only be held once by the student.
**Donor(s):** International Student Organization (ISO)
**Qualification(s):** Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.
**Amount:** several awards of $3,000

Jack and Lillian MacDonald Scholarship [E0379]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.
**Donor(s):** Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald
**Qualification(s):** Entering students coming from the Six Nations Polytechnic (SNP).
**Amount:** 1 award of $900

Jane Collins Scholarship [I0869]
Selection will be based on demonstrated significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities. Preference will be given to students engaged in community-based or community-focused projects addressing any social, political, legal, economic or health-related aspect of poverty or its prevention. The project must be part of a course of study rather than volunteer activity. Apply to the CSAHS Awards Committee by May 15 with a summary letter outlining prior significant contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities.
**Donor(s):** Mrs. Jane L. Collins, MAC RHSc 1955
**Qualification(s):** Students registered in any program offered by the College of Social and Applied Human Sciences who have completed 5.0 credits and will be participating in curriculum-embedded community-based experiential learning as part of a course of study in the following year.
**Amount:** 1 award of $1,000

Janet M. Wardlaw Medal [C0096]
Established in honour of the many contributions of Dr. Janet M. Wardlaw, a former Dean of the College of Family and Consumer Studies. Application is not required.
**Donor(s):** Faculty, staff, alumni and students, formerly FACS
**Qualification(s):** Presented to the Department of Family Relations and Applied Nutrition's nominee for the Winegard Medal.
**Amount:** 1 award of a Medal

Janet Wardlaw Memorial Scholarship [I0937]
Established in memory of Janet Wardlaw, the first Dean of Family and Consumer Studies (FACS). In odd numbered years, this scholarship recognizes a student registered in the Gordon S. Lang School of Business and Economics (LANG). In even numbered years, this scholarship recognizes a student registered in the College of Social and Applied Human Sciences (CSAHS). Additional preference will be given to students with experiential learning involving international travel. Apply by May 15th. In odd-numbered years, applications can be submitted to the Gordon S. Lang School of Business and Economics Awards Committee (lang.awards@uoguelph.ca). In even numbered years applications can be submitted to the College of Social and Applied Human Sciences Awards Committee. Include a one page letter outlining community-based service or extracurricular involvement demonstrating leadership skills and volunteerism. In addition, indicate if experiential learning opportunities involved international travel.
**Donor(s):** Class of FACS 1974
**Qualification(s):** Students registered in any program offered by LANG or CSAHS with a minimum cumulative average of 75% who have completed or are currently enrolled in curriculum-embedded experiential learning who demonstrates significant volunteer contribution to community-based service or extracurricular involvement.
**Amount:** 1 award of $1,000

Jim Stokman Memorial Scholarship [I0386]
Mrs. Stokman and family, including her sons Nick (O.A.C.’77) and Andrew (O.A.C.’84) have established this award in memory of her husband and their father to recognize his lifetime contribution to the family farm. Apply by May 15th to the OAC Awards Office with a letter that indicates rural background and demonstrated community/student involvement both during high school and the first two semesters of University.
**Donor(s):** Mrs. Jim Stokman
**Qualification(s):** Available to O.A.C. students who have completed 5.0 credits with at least ‘B’ average in one of the following programs: B.Sc.(Agr.), B.Comm., B.Sc. or B.Bus.Sc.(Env.). Students must have come from a rural background and have demonstrated community/student involvement both during high school and the first two semesters of University.
**Amount:** 1 award of $500

Joan Doherty Memorial Scholarship [I0091]
The family of Joan Doherty, class of FACS ’78, has established this scholarship in her memory. Please submit your application by email to mcsaward@uoguelph.ca by May 15 to the Department of Marketing & Consumer Studies Awards Committee, stating involvement in extra-curricular activities.
**Donor(s):** Mr. Thomas B. Doherty
**Qualification(s):** Students entering semesters 5, 6 or 7 of the Real Estate and Housing or Marketing Management majors of the B.Comm. program with a minimum cumulative average of 70% and who are active in extra-curricular activities.
**Amount:** 1 award of $2,000

John Burton Scholarship [I0642]
Established by Dr. John Burton, BSA 1962, a former faculty member in the Department of Animal Biosciences. Selection will be based on involvement with and contribution to the horse industry, future career aspirations in the horse industry sector and participation in community activities. Preference will be given to student who have demonstrated leadership ability within the student body. Apply by May 15 to the OAC Awards Office with a letter, of no more than two-pages, outlining involvement with and contributions to the horse industry, career aspirations, and extracurricular involvements. Awarded in the fall semester.
**Donor(s):** Dr. John Burton
**Qualification(s):** Students registered in any program offered by the OAC who have completed between 10.0 and 12.0 credits with a minimum 70% average
**Amount:** 1 award of $1,000

John Deere Foundation of Canada Scholarship [I00516]
Established through the generosity of The John Deere Foundation of Canada to recognize academic excellence. Application is not required.
**Donor(s):** The John Deere Foundation of Canada
**Qualification(s):** Student registered in the B.Sc Agr (Food Agriculture and Resource Economics), B.Sc.(Agr.) Agronomy, B.A. (Food Agriculture and Resource Economics), or B.Comm (Agricultural Business) program who has completed a minimum of 15.0 credits. Selection will be based on the student with the highest cumulative average. A student may be receive this award once only.
**Amount:** 1 award of $2,000
John Eccles Scholarship [I0093]

Apply to Student Financial Services, by May 15, with a letter highlighting leadership abilities through participation on residence life. Providing a reference letter would be an asset.

**Donor(s):** Student Housing Services

**Qualification(s):** Full-time student registered in semester 2, 3, 4, 5 or 6 and living in residence in the Winter semester who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in residence related activities. Residence Life Staff and paid members of Interhall Council and Hall Councils are not eligible.

**Amount:** 1 award of $1,000

John Kenneth Galbraith Scholarship in Economics [I0108]

Selection will be based on the highest combined average in Economics (ECON) courses.

**No application necessary.**

**Donor(s):** The Board of Governors, University of Guelph

**Qualification(s):** Students registered in a major offered by the Department of Economics who have completed between 12.50 and 15.00 credits.

**Amount:** 1 award of $600

Johnson Entrepreneurship Scholarship [I1077]

Chris Johnson (BComm ’97) is the founder and CEO of Crown Capital Partners. He discovered his inner entrepreneur after graduating from U of G and wants to encourage business students to consider entrepreneurship as a potential career choice. Chris believes that entrepreneurship and innovation is critical for the Canadian economy to prosper. Students are encouraged to apply to the LANG Dean’s Office, or to lang.awards@uoguelph.ca, by May 15th with a letter indicating their entrepreneurial spirit, how they will further foster this spirit (through knowledge and skills acquisition) through projects in their final year of study, and how receiving this scholarship will aid the student in their contributions to Canada’s knowledge-based society, while fostering innovation within it. Selection will be based on the degree of originality and innovation of the applicant’s business ideas and propositions described in the letter.

**Donor(s):** Chris Johnson

**Qualification(s):** Students registered in a major offered by the Gordon S. Lang School of Business and Economics who have completed a minimum of 15.00 credits.

**Amount:** 1 award of $10,000 (payable over two semesters - $5,000 in each of the fall and winter semesters)

Joseph Chen and Rob Davis Research Methods Scholarship [I1024]

The recipient of this award will have received the highest grade in MCS*3030 in the previous academic year. No application is required.

**Donor(s):** Joseph Chen and Robert Davis

**Qualification(s):** Students registered in the Marketing Management major of the B.Comm. program who have completed the course MCS*3030 Research Methods in the previous academic year.

**Amount:** 1 award of $1,000

Kae and Gordon Skinner Memorial Scholarship [C0258]

Provided by the late Kae Stalker Skinner (Mac ’30) and Gordon Skinner (O.A.C.’24), former Registrar of the Ontario Institute of Agrologists. Consideration will be given to participation in the Student Branch of the Ontario Institute of Agrologists. Apply to the O.A.C. Awards Office by April 1 with a letter demonstrating contributions to agrology.

**Donor(s):** The estates of the late Mr. and Mrs. A.G. Skinner

**Qualification(s):** O.A.C. student graduating from the B.Sc.(Agr.), B.Sc., or B.Comm. programs who has made a significant contribution to developing an understanding of the profession of agrology among fellow students.

**Amount:** 1 award of $500

Katherine Fuller Scholarship [I0107]

Established in 1931 to honour Mrs. Katherine Fuller, the Superintendent of Macdonald Hall from 1904 until her retirement in 1931. Apply to the FRAN Undergraduate Awards Committee by May 15 with a one-page description of contributions to student activities. The award will be given to the student who has made the greatest contribution to student activities in residence or on campus.

**Donor(s):** Mac-FACS-FRAN Alumni Association

**Qualification(s):** Full-time students registered in a program offered by the Department of Family Relations and Applied Nutrition, who have completed between 5.0 and 10.0 credits with a minimum cumulative average of 70%.

**Amount:** 1 award of $1,000

Keith Roy Scholarship [I0901]

Please submit your application by email to mcsaward@uoguelph.ca to the Marketing and Consumer Studies Awards Committee by May 15 with a resume outlining experience in residential real estate and up to a one page statement of interest in residential real estate. Selection will be based on demonstrated experience or interest in residential real estate as evidenced by a resume and an up to a one page statement of interest in residential real estate. Preference to a student from out of province with a particular preference for students from British Columbia.

**Donor(s):** Keith Roy

**Qualification(s):** Students registered in the Real Estate and Housing major of the B.Comm. program who have completed a minimum of 4.0 credits but not more than 17.0 credits.

**Amount:** 1 award of $1,000

Ken and Marilyn Murray Scholarship [I0734]

Dr. Kenneth G. Murray C.M., OAC BSA ’50 and Honourary Doctor of Laws ‘96, and Mrs. Marilyn C. Murray, Mac BHSc ’55, established this scholarship. Selection will be based on significant prior contributions to and experience in community-based service. Apply to the CSASH Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

**Donor(s):** Dr. Kenneth G. and Mrs. Marilyn C. Murray

**Qualification(s):** Full-time students registered in the College of Social and Applied Human Sciences with a minimum 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the province of Ontario in the following academic year will be eligible for this award.

**Amount:** 1 award of $2,000

Kenneth W. Hammond Scholarship [I0045]

Student with the highest grade in the course ENVS*2070 “Environmental Perspectives and Human Choices.” Application is not required.

**Donor(s):** Kenneth W. Hammond

**Qualification(s):** Students who have completed the course Environmental Perspectives and Human Choices ENVS*2070.

**Amount:** 1 award of $1,000

Kevin Durie Memorial Scholarship [I0653]

Established in memory of Kevin Durie, BA ’93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.

**Donor(s):** Christine Blake-Durie

**Qualification(s):** Students who are registered in any degree program on the University of Guelph campus, are a member of Residence Life staff and are academically eligible to continue as a Residence Assistant or as part of Residence Life staff.

**Amount:** 2 awards of $1,000

Kip Hunter Prize [I0139]

For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May 1

**Donor(s):** Faculty, students and staff of the Philosophy Department

**Qualification(s):** Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.

**Amount:** 1 Book prize
Lambda Foundation Scholarship in LBGT Studies [I0591]
This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LBGT peoples. Preference will be given to an applicant who is involved in the LBGT community as demonstrated by a record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a given student only once. Projects must have been completed or research proposals accepted within the past calendar year.
Applicable to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referencing involvement in the LBGT community and/or faculty support.

Donor(s): Lambda Foundation and other donors
Qualification(s): Students enrolled in a program with a thesis, a research essay, independent research project or course work programs pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.
Amount: 1 award of $1,000

LANG Distinguished Scholar Medal – Undergraduate (Winegard Medal Nominee) [C0685]
To honour the outstanding achievements of a graduating undergraduate student in the Gordon S. Lang School of Business and Economics. Application not necessary.

Donor(s): Faculty, Staff, Alumni, and Students, Gordon S. Lang School of Business and Economics
Qualification(s): LANG’s Winegard Medal nominee.
Amount: 1 Medal

LANG Distinguished Scholar Medal- Undergraduate (Highest Cumulative Average) [C0728]
This medal is presented to the student with the highest overall cumulative average. No application necessary.

Donor(s): Faculty, Staff, Alumni, and Students, Gordon S. Lang School of Business and Economics
Qualification(s): Students who are graduating in June, or who have graduated in the previous two convocations from the Gordon S. Lang School of Business and Economics.
Amount: 1 of a Medal

LANG-SA Student Leader Scholarship [I0895]
Volunteer activities may include but are not limited to holding a council position on LANG-SAs executive or management teams, Board of Directors, Student Senator, Accredited Student Organizations (ASO) or a LANG affiliate club. Selection will be based on contributions to college-related activities. Apply to the LANG Awards Committee (lang.awards@uoguelph.ca) by May 15 with a resume and a one page letter outlining volunteer/leadership experience within the college.

Donor(s): Gordon S. Lang School of Business and Economics Students’ Association
Qualification(s): Full-time students registered in any program offered by the Gordon S. Lang School of Business and Economics who have completed a minimum of 4.0 credits and can demonstrate involvement in college-related volunteer/leadership activities.
Amount: 1 award of $1,000

Leonard Conolly Exchange Student Scholarship [I0446]
Established by students, faculty, staff and friends to honour Prof. Leonard Conolly, professor of drama, Chair of the Department of Drama, 1981-88, and Associate Vice-President Academic, 1988-1992. Apply to the Centre for International Programs by April 1, for visiting during the subsequent Fall or Winter semesters. Selection, by the Centre for International Programs, will be based on assessment of (a) a one-page submission describing the significance of the student visiting Guelph to the program of study at the partner exchange who is involved in the program; (b) a one-page letter from a faculty member of the Home University, (c) consistent high performance in the course work completed, as documented by a transcript of program grades to date, submitted by the home university.

Donor(s): Students, staff, faculty and friends of Dr. Leonard Conolly
Qualification(s): Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).
Amount: 1 award of $1,000

Linda S. Allen Memorial Graduation Prize [C0914]
This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medallion, on the occasion of its second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant circumstances during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).

Donor(s): Brian Allen, Family, Friends and Colleagues of Linda S. Allen
Qualification(s): Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.
Amount: 1 award of $1,000

Mac ’41 Marketing Scholarship [I0214]
The recipient of the award will have received the highest grade in MCS*3500 in the previous academic year. Application is not required.

Donor(s): The Class of Macdonald Institute 1941 (Mac ’41)
Qualification(s): Students registered in the Marketing Management major of the B.Comm. program who has completed the course "Marketing Analysis and Planning” (MCS*3500) in the previous academic year.
Amount: 1 award of $1,000

Mac 1971 Keith and Rosalind Slater Tribute Scholarship [I0830]
Established in recognition of Dr. Keith Slater, Honourary Class President for Mac ’71, and Rosalind Slater. Selection will be based on leadership ability as demonstrated through extracurricular involvement, and/or dedication to volunteerism and community-based service in any of the following areas: family relations, applied nutrition, theatre arts, environment sciences, or children’s literacy. Apply to the CSAHS Awards Committee by May 15th with a resume and a one page summary letter outlining extracurricular involvement, leadership experience, volunteerism and community-based service, as well as how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year. The award can only be held once.

Donor(s): Class of Mac 1971
Qualification(s): Full-time student registered in any major within the College of Social and Applied Human Sciences who has completed a minimum of 8.0 credits with a minimum cumulative average of 75% and is participating in curriculum-embedded community-based experiential learning in the following academic year.
Amount: 1 award of $1,000

MAC 67 50th Anniversary Scholarship [I1090]
Established by the Class of MAC 1967 in recognition of their 50th anniversary, this award recognizes students registered in any program offered by the College of Social and Applied Human Sciences who demonstrate a commitment to the well-being of families and individuals through volunteering or experiential learning. Apply to the CSAHS Awards Committee by May 15th with a one-page letter outlining volunteer and experiential learning and a reference letter demonstrating commitment to the well-being of families and individuals.

Donor(s): The Class of MAC 1967
Qualification(s): Preference will be given to students in the Department of Family Relations and Applied Nutrition. If all else considered equal, this award will go to the student with the highest cumulative average.
Amount: 1 award of $1,000

Mac-FACS Alumni Association Scholarship - Marketing and Consumer Studies [I0523]
Awarded to the student with the highest cumulative average. Application is not required.

Donor(s): Mac-FACS-FRAN Alumni Association
Qualification(s): Full-time students registered in the Department of Marketing & Consumer Studies who have completed between 5.0 and 10.0 credits with a minimum cumulative average of 80%.
Amount: 1 award of $1,000
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Donor(s)</th>
<th>Qualification(s)</th>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mac-FACS-FRAN Alumni Association Centennial Scholarship [I0162]</td>
<td>Mac-FACS-FRAN Alumni Association</td>
<td>Full-time students registered in the BComm. program in a major offered</td>
<td>1 award of $1,000</td>
<td>Established to celebrate Canada's Centennial and awarded to a student who has shown leadership in community-based volunteer activities. Volunteer activities undertaken as part of a course requirement is excluded from consideration for this award. Please submit your application by email to <a href="mailto:mcsaward@uoguelph.ca">mcsaward@uoguelph.ca</a> by May 15 with a summary letter outlining volunteer experience and two reference contacts to the Department of Marketing and Consumer Studies. The recipient will be chosen based on the equal weighting of high academic achievement and leadership in community-based volunteer activities.</td>
</tr>
<tr>
<td>Macdonald Stewart Scholarship in Memory of Walter and May Stewart [10813]</td>
<td>The Macdonald Stewart Foundation</td>
<td>Students registered in any program offered by the College of Social and Applied Human Sciences who are participating in curriculum-embedded experiential learning opportunities in the following academic year. Preference will be given to those studying in the areas of applied nutrition, sustainable food systems or environmental governance. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year. The Macdonald Stewart Foundation will be awarded to the top student in each of the required core courses.</td>
<td>1 award of $3,500</td>
<td>Selection will be based on significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities in the following academic year. Preference will be given to those studying in the areas of applied nutrition, sustainable food systems or environmental governance. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.</td>
</tr>
<tr>
<td>Mandarin Restaurants Scholarship [10609]</td>
<td>Mandarin Restaurant Franchise Corporation</td>
<td>Students in a major of the B.Comm. program offered by the School of Hospitality, Food and Tourism Management who have completed at least 11.0 credits but no more than 14.5 credits with a minimum 75% in the last two full-time equivalent semesters.</td>
<td>1 award of $1,000</td>
<td>This scholarship will be awarded to a student who demonstrates a continued interest in the food service industry. The recipient will be selected based on academic performance and the statement of interest. Please submit your application by email to <a href="mailto:hftaward@uoguelph.ca">hftaward@uoguelph.ca</a> to the HFTM Awards Committee by January 31 using the standard HFTM Awards Application Form and include a statement of up to 500-words explaining your interest in the food service industry.</td>
</tr>
<tr>
<td>Marion McKenzie Scholarships for Outstanding Achievement in History [10470]</td>
<td>Dr. James Snell and Mrs. Leslie Snell</td>
<td>Students who have completed one of the following core courses in History: HIST<em>1050, HIST</em>2450, in the previous academic year. Application is not required.</td>
<td>2 awards of $1,000</td>
<td>These prizes have been established in memory of Marion McKenzie (1905-1994), a teacher who had a love of learning and a continuing curiosity about the world both past and present. These are awarded to the top student in each of the required core courses in the History program (HIST<em>1050, HIST</em>2450,) in the previous academic year. Application is not required.</td>
</tr>
<tr>
<td>Marketing Management Academic Achievement Scholarship (Undergrad) [10694]</td>
<td>The Department of Marketing &amp; Consumer Studies</td>
<td>Students registered in B.Comm. Marketing Management who have completed at least 9.0 credits and have a minimum 80% cumulative average.</td>
<td>1 award of $1,000</td>
<td>This scholarship will be awarded to the student with the highest cumulative average. No application required.</td>
</tr>
<tr>
<td>Mason Real Estate Scholarship [11071]</td>
<td>Mason Real Estate Ltd</td>
<td>Students enrolled in the Real Estate and Housing major with an interest in ICI (Industrial, Commercial and Investment) real estate who have completed at least 4.0 credits but no more than 6.0 credits. Preference for students from Guelph or Wellington County.</td>
<td>1 award of $1,500</td>
<td>Apply by May 15th to the Department of Marketing and Consumer Studies Awards Committee outlining your interest in a future career and relevant work experience - if any - in ICI (Industrial, Commercial and Investment) real estate, and include your permanent address. The scholarship will be awarded to the student with the highest cumulative average.</td>
</tr>
<tr>
<td>MCS Outstanding Undergraduate Marketing Major Scholarship [10692]</td>
<td>The Department of Marketing and Consumer Studies</td>
<td>Students registered in B.Comm. Marketing Management who have completed at least 9.0 credits with a minimum 80% cumulative average and participation in extracurricular activity.</td>
<td>1 award of $2,000</td>
<td>The recipient will be selected based on academic achievement, demonstrated leadership and participation in extracurricular activities. Applicants must submit a resume detailing all extracurricular activities and leadership roles. Please submit your application by email to <a href="mailto:mcsaward@uoguelph.ca">mcsaward@uoguelph.ca</a> to the Department of Marketing and Consumer Studies by May 15.</td>
</tr>
<tr>
<td>MCS Outstanding Undergraduate Real Estate and Housing Scholarship [10693]</td>
<td>The Department of Marketing and Consumer Studies</td>
<td>Students registered in B.Comm. Real Estate and Housing or Real Estate Management major who have completed at least 9.0 credits with a minimum 80% cumulative average and participation in extracurricular activity.</td>
<td>1 award of $2,000</td>
<td>The recipient will be selected based on academic achievement, demonstrated leadership and participation in extracurricular activities. Applicants must submit a resume detailing all extracurricular activities and leadership roles. Please submit your application by email to <a href="mailto:mcsaward@uoguelph.ca">mcsaward@uoguelph.ca</a> to the Department of Marketing and Consumer Studies by May 15.</td>
</tr>
<tr>
<td>Nathaniel Max Goldman Choir Scholarships [10774]</td>
<td>Mrs. Anne Goldman and the family of Nathan Max Goldman</td>
<td>Students registered in any degree program who are currently a member of the University of Guelph Symphonic Choir and/or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high vocal achievement and chorale leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required as a recommendation by Choir Director will be made to the SOFAM Awards Committee.</td>
<td>2 awards of $1,000</td>
<td>Established in honour of Mr. Goldman, an OAC graduate (1945 and 1947) and former President of the Philharmonia Society at the University of Guelph. The scholarships will support two students who demonstrate outstanding leadership and vision in the Symphonic Choir and/or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high vocal achievement and chorale leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required as a recommendation by Choir Director will be made to the SOFAM Awards Committee.</td>
</tr>
<tr>
<td>Nick Westwood Memorial Scholarship in Spectroscopy [10982]</td>
<td>Staff, faculty and friends of the Department of Chemistry</td>
<td>Students registered in any degree program with a minimum 80% cumulative average who have obtained a minimum of 80% in CHEM*2070 Structure and Spectroscopy.</td>
<td>1 award of $1,000</td>
<td>In recognition of Professor Nick Westwood’s enduring contributions to the field of Molecular Spectroscopy, and his devotion to academic development and achievement at all levels, his family, friends and Department of Chemistry colleagues have established this award to honour his memory. Selection will be based on the highest grade in CHEM*2070 Structure and Spectroscopy. In the event of a tie, the award will go to the student with the highest cumulative average. Application not required.</td>
</tr>
</tbody>
</table>
Norman McCollum Dairy Scholarship [10815]
Norman McCollum, Diploma Agriculture ’66, past president of OACAA and retired employee of the Guelph Turfgrass Institute, has created this $1500 scholarship through the OAC Alumni Foundation in recognition of his valued friendship with Glenhome Jersey Farm. Selection will be based on highest cumulative average. Apply to the OAC Awards office by May 15, with a letter stating intent to return to the family dairy farm or pursue a career in the dairy industry.

Donor(s): Norman McCollum c/o The OAC Alumni Foundation
Qualification(s): Students registered in the B.Sc. (Agri) program, the B.Sc. Animal Biology major, or the B.Comm. Food and Agricultural Business major who have completed 10.0 credits and have declared an intent to return to the family dairy farm or pursue a career in the dairy industry.
Amount: 1 award of $2,000

O.A.C. ’55 Scholarships [10064]
Provided by the class of O.A.C. ’55. Recipients will have made an outstanding contribution to College life through academic proficiency and participation in extracurricular activities and can be considered to have done the most for the College, for fellow students and in their personal development. Apply by May 15 to the OAC Dean's Office (Awards) with a letter outlining your participation in Class/College/University activities. Awarded in the fall semester.

Donor(s): O.A.C. ’55
Qualification(s): Students registered in any O.A.C. degree program or students registered in the B.ENG. program that have completed a minimum of 10.0 with at least a 70% cumulative average.
Amount: 1 award of $1,500

O.A.C. Centennial Graduate Prizes [C0209]
The Ontario Agricultural College celebrated its 100th Anniversary in 1974. Many organizations and companies associated with the agricultural industry provided funds in conjunction with the Centennial activities. Funds have been established in perpetuity as a permanent commemoration of the Centennial of the College. Apply to OAC Awards Office by April 1 with a letter outlining extracurricular activities. Selection will be based on academic achievement in semesters 7 and 8, as well as participation in extracurricular activities throughout the student's university career.

Donor(s): Dean, O.A.C.
Qualification(s): Students graduating from a degree program administered by the Ontario Agricultural College and who plan to pursue graduate study in any department or school of the Ontario Agricultural College in the year of baccalaureate graduation. The fellowship will be based on academic achievement in semesters 7 and 8, and as well as participation in extracurricular activities throughout the student's university career.
Amount: 1 award of $2,200

O.A.C. Students’ Federation Medal [C0217]
Application is not required.

Donor(s): O.A.C.
Qualification(s): Graduating student in an undergraduate degree program in a major in an O.A.C. department who has been an outstanding leader in student activities at the College level throughout his or her University career.
Amount: 1 award of a Medal

OAC’45 Public Speaking Scholarship [I0200]
Offered by the Class of ’45 O.A.C., on the occasion of their 40th anniversary. Apply with a one page letter summarizing public speaking experience to the OAC Awards Office by May 15. Selection will be based on demonstrated excellence and effort in public speaking within or outside of the University of Guelph (i.e. TEDx, Toastmasters, 4-H, community events).

Donor(s): Mr. Aubrey Hagar
Qualification(s): Students who have completed a minimum of 15.0 credits in any program offered by OAC.
Amount: 1 award of $1,500

Ottawa Valley Agri Business Association Scholarship [I0858]
Apply to the OAC Awards Office (oacaward@uoguelph.ca) by May 15 with a two page letter outlining your participation in extra-curricular activities and your demonstrated academic achievement and your interest in animal science, crop production, soil science or agricultural economics. Please include the Award Name and ID in the subject line of your email and on your application. Please also include your student ID on your application. Selection will be based on outstanding academic merit and participation in extra-curricular activities.

Donor(s): Ottawa Valley Retail Feed & Seed Dealers Association
Qualification(s): OAC students who: 1. Are registered in the Bachelor of Science in Agriculture; the Bachelor of Commerce with a major in Food and Agricultural Business; or the Bachelor of Science with a major in Animal Biology programs; 2. Have completed 4.0 to 15.0 credits and who have demonstrated involvement in extracurricular activities as well as academic interest and achievement in animal science, crop production, soil science or agricultural economics; 3. Are from Eastern Ontario (Ottawa-Carleton, Dundas-Glengarry-Stormont, Lanark, Prescott-Russell, Leeds & Grenville, Lennox & Addington, Frontenac and Renfrew counties).
Amount: 1 award of $1,000

Parrish and Heimbecker Scholarship (formerly known as Heimbecker Scholarship in Entrepreneurship) [I0388]
Parrish and Heimbecker, Limited is a private, family owned business, founded in 1909 involved in many aspects of agri-business across Canada. This scholarship was established to honour Herb Heimbecker's service and contribution to the agri-food industry in Canada. Apply by May 15 to the OAC Awards Committee at oacaward@uoguelph.ca with a resume demonstrating the students’ level of involvement with the agricultural and food industry. Please include the name of the award and the Award ID number in the subject line of your email and on your application. Please also include your student ID number on your application. Selection will be based on demonstrated commitment to the agricultural and food industry measured by the approximate number of hours a student has dedicated per week to work and/or extracurricular and/or volunteer activities related to the agricultural and food industry during their Undergraduate degree.

Donor(s): Friends and Associates of Herb Heimbecker
Qualification(s): Students registered in any OAC program, whom have completed a minimum of 10 credits who have demonstrated their passion and commitment to the agricultural and food industry through their extracurricular and/or volunteer activities during their Undergraduate degree and who aspire to have a career in the agricultural and food industry.
Amount: 1 award of $1,000

Priscilla and Stanford Reid Trust Prize [I0597]
Established in honour the first chair of the History Department, Stanford Reid, and his wife, Priscilla Reid to acknowledge the best paper written about the history of Presbyterianism and/or the Reformed tradition. Apply, by April 1, with a copy of the paper and a covering letter including contact information to the Department of History Awards Chair.

Donor(s): Priscilla and Stanford Reid Trust Fund
Qualification(s): Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.
Amount: 1 award of $500
IX. Scholarships and Other Awards, Bachelor of Commerce

Professional Staff Association Future Leader Scholarship [I1132]

This scholarship is provided to students whose leadership involvement makes a positive impact at the University of Guelph and/or the broader community. Apply by email to awards@uoguelph.ca by May 15 with one letter of reference and a personal statement (max 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average will be awarded. This award may not be held more than once.

Donor(s): The Professional Staff Association (PSA)
Qualification(s): Students registered in any program who demonstrate involvement in leadership opportunities that result in positive community impact, and who are from the immediate family of full-time, part-time, contractual or retired members of the Professional/Managerial Group at the University of Guelph. Preference will be given to a student that has not received the Professional Staff Association Scholarship in the same year.

Amount: 1 award of $1,500

Professional Staff Association Scholarship [I0628]

This scholarship is provided to students with the highest cumulative average. Apply to Student Financial Services by May 15 by sending an email to awards@uoguelph.ca and include the name of the family member of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. This award may be held more than once, however, not in consecutive years. Preference will be given to students of current or retired P.S.A. members. Selection will be based on highest cumulative average.

Donor(s): Professional Staff Association
Qualification(s): Full-time students who are from the immediate family, part-time or contractual Professional/Managerial Group employees of the University, and/or retired Professional/Managerial Group of the University of Guelph who have completed at least 5.0 credits and have a minimum 70% cumulative average.

Amount: 1 award of $1,500

Project Hero Scholarship [I0979]

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name or OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

Donor(s): University of Guelph
Qualification(s): Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

Amount: Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

RB Palmer Horticultural Scholarship [I1083]

These scholarships were established by RB Palmer in support of students who are interested in plant breeding, plant genetics and horticulture. RB Palmer was particularly inspired by Ornamental Horticulture, lilies and gladiolus in particular. Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter (no more than two pages) listing the courses you have completed that demonstrate your interest in horticulture, plant genetics or plant breeding. Selection will be based on highest cumulative average.

Donor(s): RB Palmer Horticultural Fund
Qualification(s): Students registered in a program offered by the Ontario Agricultural College who demonstrate an interest in horticulture, plant genetics or plant breeding. Preference will be given to students who demonstrate an interest in Ornamental Horticulture.

Amount: 1 award of $1,000

Resilience Scholarship (LANG) [I1127]

Apply by January 31 to the LANG Awards Committee: lang.awards@uoguelph.ca with a resume and a 500-word statement describing how the applicant has overcome adversity, demonstrated resiliency, leadership and perseverance, and how their actions have had a positive impact on others. Selection will be based on: 1. Resilience in response to personal life challenges or adversity (e.g. physical disability, financial constraints, socio-economics barriers); 2. Effective leadership, as evidenced through positions held, extracurricular activities, involvement on campus/in school and/or in the community; 3. Positive impact, on others, the Gordon S. Lang School of Business and Economics, the University of Guelph, or the broader community, as evidenced in the 500-word statement. In the event of a tie the student with the highest cumulative average will be selected. Award cannot be held more than once.

Donor(s): angel Gabriel Foundation
Qualification(s): Female students registered in the Bachelor of Commerce program who have assumed roles of leadership and who have demonstrated resilience in response to personal life challenges or adversity (e.g. physical disability, financial constraints, socio-economic barriers).

Amount: 1 award of $5,000

Scotiabank Scholarships in Leadership [I0834]

Apply to the Department of Management Awards Committee by May 15 with: 1) A 500-word personal statement describing the impact of their leadership practice in a non-profit setting including the benefits both to the student and to the organization; 2) Reference letter(s) from the organization(s) in which the leadership practice took place. In the event of a tie, the award will go to the student with the highest cumulative average. Please submit your application by email to: dom.awards@uoguelph.ca

Donor(s): Scotiabank
Qualification(s): Students who have completed the Foundations of Leadership course (HROB*2010) and either completed the required 120 hours of leadership practice for the undergraduate Certificate in Leadership in a non-profit setting or are registered in the Leadership and Organizational Management major of the BComm program and have demonstrated exceptional leadership in a non-profit setting.

Amount: 5 awards of $1,000

Shirley Louie Memorial Scholarship [I3932]

Offered by the Canadian College and University Food Services Association (CCUFS) to honour Shirley Louie, a long-time member. Please submit your application by email to bhaward@uoguelph.ca by January 31 using the standard HFTM scholarship application form and provide a maximum 500-word statement on your reasons for interest in the foodservice industry, a resume and any information you think that the HFTM Awards Committee should take into consideration.

Donor(s): Canadian College and Universities Food Services Association
Qualification(s): Student in their final year of a major offered by the School of Hospitality, Food and Tourism Management, with a minimum 70% average and an interest in the food service industry.

Amount: 1 award of $500
Shirley Surgeoner Memorial Scholarship [I1117]
In memory of Shirley Surgeoner (FACS '72), friends and family have established the Shirley Surgeoner Memorial Scholarship in which Shirley’s legacy of selflessness and giving will continue. Students apply to Marketing and Consumer Studies Awards Committee by May 15 with a letter outlining their commitment as a volunteer in their community over the last five years, or more. Selection will be based on the applicant’s indicated number of hours, in the past 5 years, to society or community as a volunteer as highlighted in their application letter.
Donor(s): The family of Shirley Surgeoner
Qualification(s): Students registered in a program offered by the Gordon S. Lang School of Business and Economics in a major offered by the Department of Marketing and Consumer Studies who have demonstrated outstanding commitment to their community through volunteer service for at least five years.
Amount: 1 award of $1,000

Skyline Scholarship [I0690]
The recipient will be selected based on academic achievement, leadership and extracurricular activities and involvement with the Real Estate and Housing major and/or in the broader community. Please submit your application by email to mcsaward@uoguelph.ca to the M&CS Awards Committee by May 15 and include a list of extracurricular activities and involvement with the REH program and/or the broader community.
Donor(s): Skyline
Qualification(s): Students registered in the Real Estate and Housing major of the BComm program who have completed at least 5.0 credits but no more than 15.0 credits with a minimum 75% in the last two full-time equivalent semesters.
Amount: 1 award of $1,500

Skyline Scholarship in Property Management [I0909]
This award was created to support students who have demonstrated leadership in extracurricular activities and involvement related to real estate and housing through on-campus contributions and/or community involvement. Please submit your application by email to mcsaward@uoguelph.ca. to the MCS Awards Committee by May 15 with a resume highlighting real estate and housing related extracurricular activities and involvement.
Donor(s): Skyline Asset Management
Qualification(s): Students registered in the Real Estate and Housing major who have achieved a minimum grade of 75% in REAL*3890 Property Management.
Amount: 1 award of $1,500

Skyline Scholarship in Real Estate Sustainability [I0913]
Established by Skyline Asset Management, this $1500 scholarship was created to support students registered in the Real Estate and Housing major who have achieved a minimum grade of 75% in REAL*4870 (Sustainable Real Estate) and who have demonstrated leadership in extracurricular activities and involvement related to real estate and housing through on-campus contributions and/or community involvement. Please submit your application by email to mcsaward@uoguelph.ca. to the MCS Awards Committee by January 31 including a resume highlighting real estate and housing related extracurricular activities and involvement.
Donor(s): Skyline Asset Management
Qualification(s): Students registered in the Real Estate and Housing major who have achieved a minimum grade of 75% in REAL*4870 (Sustainable Real Estate) and have demonstrated leadership related to real estate and housing through on-campus contributions and/or community involvement.
Amount: 1 award of $1,500

Smart Serve Ontario Scholarships [I0550]
Established by Smart Serve Ontario, a non-profit organization dedicated to promoting the responsible service of alcohol. Application is not required.
Donor(s): Smart Serve Ontario
Qualification(s): Students in the B.Comm. program in a major offered by the School of Hospitality, Food and Tourism Management who have completed between 6.0 and 8.0 course credits with the highest cumulative average and the Smart Serve certification program.
Amount: 2 awards of $675

Sports Media and Sports Broadcasting Scholarships [I1035]
Apply by May 15th to Student Financial Services by submitting a one page letter outlining sports media or sports broadcasting experience in the past year. Letters can be submitted by email to awards@uoguelph.ca. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minoring in Media and Cinema Studies and who have the highest GPA.
Donor(s): Rogers Media Inc.
Qualification(s): Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas. To be awarded to a graduate student, then to a graduate student if no undergraduate students apply.
Amount: 2 awards of $2,500

Stephan Wilken Volunteer Scholarship [I0449]
Established by the Wilken family in memory of Stephanie Wilken, BA 1995. Apply to Student Financial Services with letter indicating the kind and extent of volunteer activities at the Wellness Centre by October 1. Selection committee is the Senate Committee on Awards on the recommendation of the Student Wellness Educator at the Wellness Centre.
Donor(s): Bev and Darlene Wilken
Qualification(s): Student registered in any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre.
Amount: 1 award of $1,000

Summerlee Humanitarian Scholarships [I0964]
The Summerlee Humanitarian Scholarships are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues of global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a varsity athlete (varsity athletes should self-identify in their letter). While applicants who demonstrate past significant impacts in improving local communities/groups will be considered, preference will be given to applicants with strong previous proven international humanitarian efforts. Recipients must adhere to the University of Guelph’s Safe Travel Policy.
Donor(s): The Angel Gabriel Foundation
Qualification(s): Students registered in any program with no more than 17.0 credits completed who have demonstrated a commitment to humanitarian efforts including but not limited to those affecting refugees, displaced persons, and populations affected by conflict and natural disasters through volunteer positions, prior employment and/or extra-curricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues. Letters must be accompanied by a resume highlighting leadership and extra-curricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.
Amount: 5 awards of $10,000 ($5,000 in each of the fall and winter semesters), plus an additional up to $4,000 to support travel costs

Susan Travers Memorial Scholarship [I0975]
Established by friends, family and colleagues in Alumni Affairs and Development in Memory of Susan Travers. Susan believed in the value of education. She worked for the University of Guelph as a member of Alumni Affairs and Development and in the Department of Business. She not only encouraged her children to pursue post-secondary education, but led by example, pursuing her university degree as a mature student. Preference will be given to students registered in CAHSAH and LANG. Selection will be based on highest cumulative average. No application required.
Donor(s): The staff in Alumni Affairs and Development and Friends
Qualification(s): Students who were accepted to the University of Guelph as a “mature student” applicant and who are currently registered in any degree program.
Amount: 1 award of $1,000
T.K. Warley Agrifood Policy Prize [I0212]

Established by Prof. T.K. Warley, former Chair of the Department of Food Agriculture and Resource Economics and a faculty member of the Ontario Agricultural College from 1970 to 1991. Application is not required.

Donor(s): Professor T.K. Warley
Qualification(s): Student providing the best term paper written on a public policy issue relating to the agrifood system or rural society in courses such as AGEC*3030 Price and Production Analysis, AGEC*4000 Agricultural and Food Policy, and AGEC*4720 Special Study in Food Agriculture and Resource Economics.

Amount: 1 award of $500

Thomas H. Peters Scholarship [I0233]

Application is not required.

Donor(s): Friends and associates of Thomas H. Peters
Qualification(s): Student in any academic program of the University who has completed courses in Land Reclamation (e.g. CROP*2280, SOIL*3200 ), with a minimum 10.0 credits completed. Applicants must have a minimum of 70% cumulative average and have demonstrated an interest and aptitude in the area of crops and land reclamation.

Amount: 1 award of $500

Toronto District Beekeeper's Association Scholarship [I0285]

A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application is not required.

Donor(s): Mr. Jack Robinson
Qualification(s): Recipient will have good academic standing, have participated in extracurricular activities, and demonstrated keen interest in beekeeping.

Amount: 1 award of $500

United Steelworkers Local 4120 Scholarship [I0293]

Apply to Student Financial Services by January 31 and provide the name of the USWA member and relationship to the applicant. If there is more than one eligible candidate, the award will go to the one who has attained the highest relative class standing in his or her previous full-time semester.

Donor(s): United Steelworkers LU4120
Qualification(s): Student who is a member or former member, or who is from the immediate family of a member of United Steelworkers LU 4120, and who is entering semester 2, 3, or 4 of a degree or diploma program in the Winter semester with a minimum 70% cumulative average.

Amount: 1 award of $1,000

University of Guelph Alumni Legacy Scholarship [I0735]

Funded through donations made to the University of Guelph Alumni Memorial Fund in memory of deceased alumni. The recipient will be selected based on academic achievement and volunteer contributions to the University of Guelph community. Apply to Student Financial Services by May 15 with a cover letter indicating name, degree and year of graduation of alumna/alumnus relative and a resume or summary of leadership and volunteer contributions to the University of Guelph community.

Donor(s): Various donors c/o University of Guelph Alumni Association Memorial Fund
Qualification(s): Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with both a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumna/us of the University of Guelph or its founding colleges.

Amount: 1 award of $1,000

University of Guelph Retirees Association Scholarship [I0569]

Established in 2007 to acknowledge in-course student achievement. The student having the highest cumulative average will be selected and in the event of a tie, the student with the highest average in the last two semesters of full-time studies will be chosen. Apply by May 15th to Student Financial Services with a letter indicating name of and relationship to a retiree of the University of Guelph. Recipients cannot hold this scholarship and another scholarship greater than $1,500 at the same time.

Donor(s): University of Guelph Retirees Association (U.G.R.A.)
Qualification(s): Students with a minimum cumulative average of 75% registered in a degree program who are related to a retiree of the University of Guelph as child, grandchild or great grandchild who have not held the scholarship before.

Amount: 1 award of $1,500

Van Stralen and Van Der Hoven Memorial Scholarship [I0296]

The scholarship will be awarded to the student who has demonstrated academic achievement and exemplary leadership. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca on a one-page summary demonstrating leadership skills gained through participation in extracurricular activities, both within the university and the broader community. Preference will be given to students who have completed between 3 and 10 credits at the time of application for the award.

Donor(s): Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoven & family
Qualification(s): Students registered in any program who have achieved a minimum of 80% cumulative average and participated in extra-curricular activities.

Amount: 1 award of $2,000

W.C. Winegard Medal [C0311]

The W.C. Winegard Medal is the most prestigious and top convocation award presented to an undergraduate student at the University of Guelph. Named for former University President Dr. William Winegard, the medal is awarded in recognition of both academic achievement and contributions to the university and community life. One student will be nominated by each College Awards Committee. The Senate Honours and Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application is not required.

Donor(s): The Board of Governors of the University
Qualification(s): Students who are graduating in June, or who have graduated in the previous two convocations who excel both academically and in contributions made to the university and community life.

Amount: 1 award of a Gold medal

W.N. Vaughan Medal [C0299]

A medal may be given annually to a student senator who has high academic standing and who has made a substantial contribution to student life and to the university, particularly through involvement in and commitment to Senate activities. Prospective candidates will be nominated by senators and the medal winner will be chosen by a committee selected by the Senate Bylaws and Membership Committee. The medal will be awarded at June convocation. No application is necessary.

Donor(s): Friends of Walter N. Vaughan
Qualification(s): Student senator who has high academic standing and who has made a substantial contribution to student life and to the University, particularly through involvement in and commitment to Senate activities.

Amount: 1 award of a Medal

Warren Jestin Scholarship in Canadian Economic Policy [I0557]

Dr. Warren Jestin, a B.A. and M.A. economics graduate of the University of Guelph and a member of the University’s Board of Governors from 1997 to 2003, provides this award to a student registered in an honours degree in either the B.A program with a major in Economics or the B.Com program with a major in Management Economics in Industry and Finance. The award winner will have achieved the highest cumulative average across all economics policy courses taken. Application is not required.

Donor(s): Warren Jestin
Qualification(s): Full-time registered in BAH.ECON or BCOM.MEIF that has completed a minimum of two credits in the 3000 and 4000 level courses oriented towards economic policy, has achieved a minimum average of 80% in those courses, and has completed at least 15.0 credits towards their degree completion.

Amount: 1 award of $1,500

Warren Stein Memorial Scholarship [I0958]

Apply by May 15th to the OAC awards committee (oacaward@uoguelph.ca) with a letter (maximum 2 pages) outlining your studies related to swine. Please include the name of the award and the award ID number in the subject line of your email and on your letter. Selection will be based on the highest cumulative average.

Donor(s): Canadian Swine Breeders Association
Qualification(s): Students registered in any program offered by OAC who have completed 10.0 credits or more and who are engaged in swine related studies.

Amount: 1 award of $2,000
Waterloo-Wellington CPA Association Scholarship [I0367]
Apply to the Department of Management Awards Committee by May 15 with a 100 word or less statement describing why you intend to pursue a career as a Chartered Accountant (CA) and a resume that includes activities demonstrating involvement in the local community. Please submit your application by email to dom.awards@uoguelph.ca.

Donor(s): Waterloo-Wellington Chartered Professional Accountants Association
Qualification(s): Students registered in the Bachelor of Commerce Accounting major who have completed between 4.5 and 12.5 credits and have a minimum 80% average in their accounting (ACCT) courses.
Amount: 1 award of $500

William Furlong Scholarship in Economics [I0886]
The Department of Economics & Finance offers this scholarship in honour of Professor William Furlong, a long-term member of the Department of Economics & Finance and a leader in the scholarship of teaching principles of microeconomics, to the student with the highest final grade in Introductory Microeconomics (ECON*1050) in the fall semester. Application is not required.

Donor(s): Colleagues & Friends of Dr. William Furlong
Qualification(s): Students registered in any program offered by the Gordon S. Lang School of Business and Economics who complete the course Introductory Microeconomics (ECON*1050) in the Fall semester.
Amount: 1 award of $900

In-course Scholarships with Financial Need

Agnes Yuen Leadership Scholarship [I4401]
Apply by October 7 to Student Financial Services with a completed University of Guelph Financial Need Assessment Form along with a statement of up to 500 words outlining leadership and involvement in volunteer activities. Selection will be based on demonstrated exemplary leadership through involvement with on campus or off campus volunteer activities (student associations/charitable or non-profit organizations) as described in a statement. ACCESS AWARD

Donor(s): Mr. John and Mrs. Agnes Yuen with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in a program offered by the Gordon S. Lang School of Business and Economics who have completed between 5.0 and 17.5 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 1 award of $2,400

Barbara A. Bowen Scholarship [I4390]
Established by Barbara A. Bowen, MAC ’57. Preference will be given to students registered in Department of Family Relations and Nutrition. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Barbara A. Bowen with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students who have a minimum 75% average and are registered in any degree program in the College of Social and Applied Human Science with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 1 award of $5,500

Bill Allen Scholarship [I4544]
This scholarship is awarded in honour of Bill Allen, former Deputy Minister, Tourism and Recreation. The Ontario Tourism Industry with the assistance of the Ontario government's OTSS program established this scholarship for the student that demonstrates financial need, high academic achievement and evidence of strong leadership ability. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services, by October 7 and include a resume and complete list of extracurricular activities. Students must list this award name on the N.A.F. Awarded in the Winter semester. ACCESS AWARD

Donor(s): Ontario Tourism Industry, friends and colleagues of Bill Allen
Qualification(s): Students must be enrolled in a major offered by the School of Hospitality, Food and Tourism Management, have completed 8.00 to 12.50 credits at the time of application, and have at least a 75% average in the last two equivalent full-time semesters. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 1 award of $2,500

Brian Kenneth Howard Memorial Scholarship [I4548]
Established by Kenneth and Irene Howard in memory of their son, Brian Kenneth Howard. Awarded to a student assessed as having financial need with a preference given to students from York, Durham or Simcoe counties. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Kenneth and Irene Howard with matching funding through the Ontario Trust for Student support program
Qualification(s): Student registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 1 award of $3,000

Canada Bread Limited Scholarships [I4509]
Provided annually by Canada Bread Limited with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services, by October 7. To be considered for this award you must list it on your N.A.F. The scholarships will be distributed based on financial need. ACCESS AWARD

Donor(s): Canada Bread Limited with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Student must have completed 13.00 to 17.50 credits in the B. Comm. program, in a major offered by the School of Hospitality, Food and Tourism Management, at the time of application and have at least 70% average in the last two equivalent full-time semesters. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 2 awards of $1,300

City of Guelph 175th Anniversary Scholarship [I0515]
Funded by a leadership gift from the City of Guelph and donations from business and community leaders, this scholarship was established in 2002. Apply to Student Financial Services by October 7 with a letter describing volunteer activities, one reference letter from an individual familiar with the volunteer and/or community service contributions, and a completed Financial Need Assessment Form (N.A.F.). Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need. This award may be held only once.

Donor(s): The Guelph Community Foundation
Qualification(s): Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70.0% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.
Amount: 1 award of $2,000

Dr. Kenneth & Nancy Lawless [I4552]
Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Dr. Kenneth W. Lawless with matching funding through the Ontario Trust for Student Support program
Qualification(s): Student registered in any program offered by the Ontario Agricultural College who has completed at least 5 credits with a minimum cumulative average of 75% and has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 1 award of $2,700

Eleanor Morgan & Bill Archibald Scholarships [I4540]
The family of Eleanor and Bill Archibald, with the assistance of the Ontario government's OSOTF program, provide this scholarship in memory of their parents. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining community involvement to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): The Family of Eleanor & Bill Archibald with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any program with a minimum of 5.0 credits who have cumulative 70% average, has demonstrated community involvement, and financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $2,500
### Erin Demers Memorial Scholarship [I0406]

The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.) and a covering letter from any previous or current employer in the hotel, food and tourism industry. This scholarship is awarded to a student who has demonstrated a positive impact on their community. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Donor(s):** Family and friends of Erin Katrina Demers

**Qualification(s):** Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

**Amount:** 1 award of $1,800

### Euclid-Hitachi Scholarships [I4517]

Established by Euclid-Hitachi Canada Ltd., with the assistance of the Ontario government's OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD

**Donor(s):** Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $500

### Four Seasons Hotels and Resorts ACCESS Scholarship [I4533]

Established with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.), one letter of reference from a previous or current employer in the hotel, food and tourism industry and a covering letter from the applicant that includes a statement of interest in the industry to Student Financial Services, by October 7. ACCESS AWARD

**Donor(s):** Four Seasons Hotels and Resorts Ltd. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in the B.Comm. program, in a major offered by the School of Hospitality, Food and Tourism Management, who have completed 13.0 to 17.5 credits at the time of application and have at least a 70% average in the last two equivalent full-time semesters. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.

**Amount:** 2 awards of $1,500

### MAC 1954 Scholarship [I0911]

The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7. The award will be distributed based on financial need.

**Donor(s):** Class of MAC 1954

**Qualification(s):** Students registered in any degree program offered by the College of Social and Applied Human Science with a minimum 75% average with demonstrated financial need.

**Amount:** 1 award of $1,350

### Journey's End Management Inc. Scholarships (ACCESS) [I4504]

Offered by Journey’s End Corporation with the assistance of the Ontario government’s OSOTF. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. The award will be distributed based on financial need.

**Donor(s):** Journey’s End Corporation with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students in the B.Comm. program, in a major offered by the School of Hospitality, Food and Tourism Management, who have completed 13.0 to 17.5 credits at the time of application and have at least a 70% average in the last two equivalent full-time semesters. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.

**Amount:** 1 award of $1,800

### Nora Spence Memorial Scholarship [I4394]

This scholarship was created by George and Jane Spence in memory of their daughter Nora Spence, O.A.C. BSc.’06 with the aid of the Ontario government’s OSOTF program. Selection will be based high academic achievement. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a one-page letter demonstrating the positive impact their contributions had on the community. The scholarships will be awarded based on financial need.

**Donor(s):** Jane and George Spence with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** B.Sc. students registered in an any degree program offered by the College of Social and Applied Human Science with a minimum 75% average with demonstrated financial need.

**Amount:** 1 award of $1,200

### Marriott Scholarship in Tribute to Stuart Jolliffe [I4553]

This scholarship was established in honour Stuart A. Jolliffe's legacy and the significant impact he had not only in hospitality, but in the communities where he lived. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a one-page letter demonstrating the positive impact their contributions had on the community. The scholarships will be awarded based on financial need.

**Donor(s):** Marriott Hotels & Resorts Canada with the assistance of Ontario government’s OSOTF program.

**Qualification(s):** Students registered in a major offered by the School of Hospitality, Food and Tourism Management, who have completed 8.0 to 12.5 credits, with at least a 70% cumulative average, and who have demonstrated financial need. Preference will be given to students who have demonstrated a positive impact on their community. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.

**Amount:** 2 awards of $1,200

---

**Last Revision: July 4, 2019**

2019-2020 Undergraduate Calendar
### Profile Hospitality Group Scholarship [10889]

Apply with a completed Financial Need Assessment Form (N.A.F.) by October 7 to Student Financial Services. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Applications from International students must include their NAF along with a letter indicating interest in being considered for this scholarship.

**Donor(s):** Profile Hospitality Group  
**Qualification(s):** Students registered in any major offered by the School of Hospitality, Food and Tourism Management with financial need and who have completed a minimum of 14.0 credits.  
**Amount:** 1 award of $1,000

### R. Douglas and Kathleen Kennedy Scholarship in O.A.C. [10547]

Douglas (O.A.C. ‘39) and Kathleen (MAC ‘39) Kennedy met at a “hop” on campus in 1937 and later married. They established this scholarship to celebrate their time on campus and their 62 years of marriage. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy  
**Qualification(s):** This scholarship will be awarded to a student in O.A.C. with high academic achievement and demonstrated financial need.  
**Amount:** 1 award of $1,200

### Recipe Unlimited Corporation Scholarships [14503]

Provided by Recipe Unlimited Corporation, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services, by October 7. To be considered for this award, you must list it on your N.A.F. ACCESS AWARD.

**Donor(s):** Recipe Unlimited Corporation with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students registered in a major offered by the School of Hospitality, Food and Tourism Management, who have completed at least 4.0 credits but no more than 17.5 credits at the time of application and have at least a 70% average in the last two full-time equivalent semesters. Preference will be given to students with no more than 7.5 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 2 awards of $2,500

### Residence Life Staff Scholarship [10697]

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7. Recipients of this award can have this award maintained terms for receipt of an OSOTF award (see General Statements on Awards).

**Donor(s):** Residence Life Staff  
**Qualification(s):** Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program.  
**Amount:** 2 awards of $500

### Returning Student Residence Scholarship [10696]

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must have resided in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award.

**Donor(s):** Student Housing Services  
**Qualification(s):** Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average.  
**Amount:** 3 awards of $500

### Tara Lynn Giuliani Memorial Scholarship [10375]

Funded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form. Selection is based on financial need.

**Donor(s):** Tara Lynn Giuliani Foundation at the Hamilton Community Foundation  
**Qualification(s):** Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services and who have demonstrated financial need. Preference given to students with a visual impairment.  
**Amount:** 1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000

### TDL Group Corp. Brian Cresswell Memorial Scholarship [14545]

This scholarship was established by the TDL Group Corporation with the assistance of the Ontario government’s OTSS program and is awarded in memory of Brian Cresswell, former Assistant Director of Research and Development, who during his 13 years with the TDL Group Corp. was instrumental in the development of some of Tim Horton’s most successful products. He is remembered by his friends at TDL for his positive attitude, passion and incredible commitment to the company. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services, by October 7. ACCESS AWARD.

**Donor(s):** The TDL Group Corporation with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students registered in the Hotel and Food Administration major of the B.Comm. degree program who have completed at least 8.0 credits but no more than 17.5 credits with a minimum 75% average in the last two full-time equivalent semesters and have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** 1 award of $4,500

### Westmont Hospitality Group ACCESS Scholarship [14126]

Provided by Journey’s End Corporation with the assistance of the Ontario government's OSOTF. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. To be considered for this award, you must list it on your N.A.F. The award will be distributed based on financial need. ACCESS AWARD.

**Donor(s):** Journey’s End Corporation with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students in the B.Comm. program, in a major offered by the School of Hospitality, Food and Tourism Management, who have completed 13.0 to 17.5 credits at the time of application and have at least a 70% average in the last two equivalent full-time semesters. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 1 award of $1,350

### William & Nona Heaslip Scholarship [10589]

Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7. Recipients of this award can have this award renewed for up to 3 years provided they continue to demonstrate financial need and maintain a minimum 70% cumulative average of full-time (minimum 80% of a full course load) study. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** The William and Nona Heaslip Foundation  
**Qualification(s):** Students that have completed 4.0 credits but no more than 6.0 credits in any degree program; are a Canadian citizen/permanent resident; have a minimum 70% cumulative average; and demonstrate financial need.  
**Amount:** 2 awards of $15,000

### In-course Bursaries

**Acer Saccharum Bursary [13083]**

Apply by October 7th to Student Financial Services with a financial aid assessment to be considered for this award.

**Donor(s):** Steven Ardran and Celine Batterink  
**Qualification(s):** Students registered in any degree program at the University of Guelph, who have demonstrated financial need and are registered with Student Accessibility Services.  
**Amount:** 1 award of $1,000
### Beef Farmers of Ontario Degree Bursaries [I3506]
Prior to 2017-18, this bursary was called the Ontario Cattlemen’s Association Degree Bursary. Selection will be based on financial need. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD.**

**Donor(s):** Beef Farmers of Ontario and the O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need who have completed a minimum of 8.0 credits in the B.Sc. (Agr.), B.Comm.(Food and Agricultural Business), B.Sc.(Animal Biology) or B.Sc.(Food Science) program. Additionally, students must meet the government-mandated terms for receipt of an **OSOTF** award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

### Burnbrae Farms Bursaries [I3525]
Established by Burnbrae Farms, with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD.**

**Donor(s):** Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an **OSOTF** award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

### Brinson Partners Inc. Bursaries [I3526]
Brinson Partners Inc., with the assistance of the Ontario government's OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD.**

**Donor(s):** Brinson Partners Inc. with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an **OSOTF** award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

### Campbell-Ouellette Family Bursary [I3098]
Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family’s broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Dr. Malcolm Campbell  
**Qualification(s):** Students registered in any program with demonstrated financial need.

**Amount:** 1 award of $2,000

### Canadian Imperial Bank of Commerce Bursaries [I3511]
Established by the Canadian Imperial Bank of Commerce, with the assistance of the Ontario government’s OSOTF program, to assist students to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD.**

**Donor(s):** Canadian Imperial Bank of Commerce with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time B.Comm. students majoring in Management Economics in Industry and Finance, or Marketing Management. Students must be in semester 2 or beyond at the time of receiving the award. Additionally, students must meet the government-mandated terms for receipt of an **OSOTF** award (see General Statements on Awards).

**Amount:** 2 awards of $1,300

### Carole McPherson Memorial Hotel & Tourism Bursary [I3080]
In memory of Carole McPherson two bursaries are awarded: one to a student registered in the Hotel and Food Administration major; and one to a student registered in the Tourism Management major of the B.Comm. program. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** The Estate of Carole McPherson  
**Qualification(s):** Students registered in the Hotel and Food Administration major or the Tourism Management major of the B.Comm. program who have completed a minimum of 5.0 credits and have demonstrated financial need.

**Amount:** 2 awards of $2,000

### Class of ’72: 25th Reunion Bursaries [I3512]
Established by the Class of ’72: 25th Reunion Fund with the assistance of the Ontario government’s OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD.**

**Donor(s):** Class of ’72: 25th Reunion with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an **OSOTF** award (see General Statements on Awards).

**Amount:** 3 awards of $1,000

### Class of O.A.C. ’33 Bursaries [I3531]
Established by the class of O.A.C. ’33 on the occasion of their 65th Anniversary, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD.**

**Donor(s):** Class of 1933 (in honour of the late Prof. W.I.J. Squirrell) with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an **OSOTF** award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

### Class of O.A.C. ’36 Bursaries [I3501]
Established by the Class of O.A.C. ’36 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD.**

**Donor(s):** Class of 1936 with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** One to a student registered in the Hotel and Food Administration major; and one to a student registered in the Tourism Management major of the B.Comm. program. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Class of ’36 with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** One to a student registered in the Hotel and Food Administration major; and one to a student registered in the Tourism Management major of the B.Comm. program. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Class of ’36 with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** One to a student registered in the Hotel and Food Administration major; and one to a student registered in the Tourism Management major of the B.Comm. program. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Class of ’36 with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** One to a student registered in the Hotel and Food Administration major; and one to a student registered in the Tourism Management major of the B.Comm. program. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Amount:** Several awards of varying amounts

### David Havoic Bursary [I3087]
Established by the Havoic family, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to the student with the greatest financial need. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and attach a letter from Student Accessibility Services confirming registration and physical disability.

**Donor(s):** Debbie and David Havoic  
**Qualification(s):** Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.

**Amount:** 1 award of $1,000
### David R. Leach Memorial Bursary [I3534]
Provided in memory of David R. Leach by his family, with the assistance of the Ontario government's OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. '73 and graduated with a B.Sc. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7. ACCESS AWARD

**Donor(s):** Mrs Deborah Leach-Sartor with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students who are physically disabled as determined by the Student Accessibility Services with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,000

### Elizabeth Burton Bursaries [I3503]
Mrs. Elizabeth Burton, with the assistance of the Ontario government's OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

### Denis and Patricia Yates Bursary [I3097]
Established by Charlotte Yates in memory of her parents who were strong advocates for the value of education in society. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Dr. Malcolm Campbell

**Qualification(s):** Students registered in any program with demonstrated financial need.

**Amount:** 1 award of $2,000

### Donna Demerling-Pee Bursary [I3082]
Established by Mrs. Donna Pee, Mac BHSc 1967, for first generation students registered in any program offered by the College of Social and Applied Human Sciences. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and a statement identifying as a first-generation student.

**Donor(s):** Mrs. Donna Pee, Mac BHSc 1967

**Qualification(s):** Students registered in any program offered by the College of Social and Applied Human Sciences with demonstrated financial need and a minimum of 10.0 completed credits. Preference will be given to students registered in BASc. With a major in Applied Human Nutrition or BASc. With a major in Child, Youth and Family.

**Amount:** 1 award of $1,000

### Dr. Gordon Macleod Memorial Bursary [I3093]
Established in memory of Dr. Gordon Macleod and in dedication to his interest in the dairy industry. Apply to Student Financial Services (awards@uoguelph.ca) with a completed Financial Need Assessment Form (N.A.F.) and a letter reflecting on your interest in dairy related studies by October 7. Please be sure to include your name, student ID number, your program of study and the award you’re applying to on your letter and application. Please email your application to awards@uoguelph.ca and include the award name and ID number in the subject line.

**Donor(s):** Cynthia Macleod

**Qualification(s):** Students registered in any degree program offered by OAC, who have financial need and who can demonstrate an interest in dairy related studies.

**Amount:** 1 award of $3,000

### F. Elsie M. Brown and William R. Brown Bursary [I3091]
Supported by a gift from the Estate of Fredelene Elsie May Brown and her predeceased husband, William Robert Brown. Apply to Student Financial Services by Oct 7 with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Estate of Fredelene Elsie May Brown

**Qualification(s):** Students registered in any program offered by the OAC who have completed at least 10.0 credits and demonstrate financial need.

**Amount:** 2 awards of $2,500

### George and Margaret J. Miles Memorial Bursary [I3544]
Established by the family to honour the memory of the parents, George and Margaret J. Miles, life long supporters of education. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter describing involvement in extra-curricular activities to Student Financial Services by October 7. ACCESS AWARD

**Donor(s):** Established by the Miles Family with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** All undergraduate arts and social science students with demonstrated financial need who are in or beyond semester 3 and have at least a 75% cumulative average in all courses completed to date are eligible to apply. Preference will be given to students who participate and provide leadership in extra-curricular or community activities (examples include student government, charitable organization, volunteer work, Big Brothers/Sisters, contributions to school and/or community, etc.). Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $2,000

### Gonder Family Bursary [I3543]
Established by the Gonder Family, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services, by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Preference will be given to a student who has held the award in the previous year. The award can be held a maximum of three times (years two to four of study). ACCESS AWARD

**Donor(s):** Dr. John Gonder and family with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time B.Comm. students with 5 to 15 course credits, majoring in Management Economics in Industry and Finance or Marketing Management with at least a 70% cumulative average, and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,500

### Egg Farmers Ontario Bursaries [I3507]
Provided by the Ontario Egg Producers' Marketing Board and the O.A.C. Alumni Foundation with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. To be considered for this award you must indicate it on your N.A.F and include a statement outlining your interest in the poultry industry. ACCESS AWARD

**Donor(s):** Egg Farmers Ontario with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with demonstrated financial need who have completed semester 2 and are enrolled in the B.Sc. (Agr.) or B.Comm. (Agricultural Business) programs and who have a 60% minimum cumulative average. Preference will be given to students who have demonstrated an interest in the poultry industry. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

### Grand River Chapter (Chartered Professional Accountants of Ontario) Bursary [I3032]
Donated by the Grand River Chapter of the Chartered Management Accountants of Ontario. Preference will be given to students who attended a secondary school in the County of Perth, Waterloo or Wellington. Apply to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Chartered Professional Accountants of Ontario

**Qualification(s):** Full-time student in financial need and registered in the B.Comm. program.

**Amount:** 1 award of $500
Gryphon Investment Council Bursaries [I3513]

Established by Gryphon Investment Counsel, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**ACCESS AWARD**

**Donor(s):** Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

Guelph Compassionate Health and Dental Bursary [I3061]

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph’s mandatory Student Health Plan, University of Guelph’s Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment form; (2) a letter from physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and it’s impact on the student’s studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) Insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

**Donor(s):** Student Health and Dental Plan Reserve

**Qualification(s):** Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student’s academic progress.

**Amount:** Several awards of various amounts to a maximum of $1,500

Guelph Student Assistance ACCESS Bursaries [I3556]

These bursaries have been established and approved by undergraduate students through student referendum with the aid of the Ontario government's OTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**ACCESS AWARD**

**Donor(s):** Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** Several awards of varying amounts up to $1,000

Guelph Student Assistance Program [I3056]

These bursaries have been established and approved by undergraduate students through student referendum to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** Undergraduate Students

**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need.

**Amount:** Several awards of varying amounts up to $1,000

Gwen Karr Memorial Bursary [I3010]

Mr. T.K.C. Karr, O.A.C. ’32, has provided an endowment fund to assist students in a degree or diploma program of the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Mr. T.K.C. Karr, O.A.C. ’32

**Qualification(s):** O.A.C. students with demonstrated financial need.

**Amount:** Several awards of various amounts

Helen Mahon Memorial Bursary [I3063]

Established in memory of Helen Mahon, a long-time employee of the University of Guelph and who, following the death of her husband, raised three young children alone, all of whom graduated from university. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a statement that indicates you meet the criteria of this bursary. Awarded in the winter.

**Donor(s):** Family and Friends of Helen Mahon

**Qualification(s):** Students registered in any program who come from a family where one parent is deceased.

**Amount:** 1 award of $500

Howard and Myrtle Rogers Bursaries [I3537]

Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**ACCESS AWARD**

**Donor(s):** The Estate of Howard and Myrtle Rogers

**Qualification(s):** Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate on-going financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 10 up to $2,000

Indigenous Student Bursary [I3068]

In 2009, the Ministry of Advanced Education and Skills Development established this bursary as part of their new Aboriginal post-secondary education funding initiative. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with financing their education. Apply to Student Financial Services by October 7th with a Financial Need Assessment Form and complete the Indigenous Student Bursary application. Selection is based on financial need.

**Donor(s):** Ministry of Advanced Education and Skills Development (MAESD)

**Qualification(s):** Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP) and have demonstrated financial need.

**Amount:** several awards ranging in values from $1,000 to $3,500

International Emergency Medical Aid Assistance [I3059]

The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an ongoing basis.

**Donor(s):** University of Guelph

**Qualification(s):** International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.

**Amount:** Several awards of varying amounts

Last Revision: July 4, 2019
### Irvine and Grace Black Memorial Bursary [I3051]

Established in memory of Irvine and Grace Black, by friends and family to recognize their many contributions to young people. Irvine, a well-known sheep breeder, was a judge at College Royal and the Royal Winter Fair for over fifty years, and Grace was active in the Women’s Institute and the Fergus Fall Fair. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining involvement in the 4-H Club and/or a Women’s Institute by October 7.

**Donor(s):** Family and friends of Irvine and Grace Black  
**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to applicants who are, or have been, active in the 4-H Club and/or a Women’s Institute.  
**Amount:** 1 award of $500

### Ivey Cook Bursaries [I3076]

Apply to SAS using the "New Student Intake Form" and a letter explaining your situation and attach documentation showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first come first served basis, based on the validity and need for an assessment.

**Donor(s):** Suzanne Ivey Cook  
**Qualification(s):** Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment.  
**Amount:** several awards of up to $1,000

### Joan Weatherly Memorial Bursary [I3065]

Established by the estate of Joan Weatherly, CSS BA ’82, a long-time employee of the University and Sociology graduate with a keen interest in the issues of mature female students. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) and a letter identifying admission status as a mature female student, if applicable. Preference will be given to mature-applicant status female students.

**Donor(s):** The Estate of Joan Weatherly  
**Qualification(s):** Students registered in any degree program in the departments of Geography, Political Science, Psychology and Sociology & Anthropology with demonstrated financial need.  
**Amount:** 1 award of $1,500

### Joyce Barclay-Ogden Bursary [I3074]

Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Joyce Ogden  
**Qualification(s):** Students registered in any program in the College of Social and Applied Human Sciences with demonstrated financial need.  
**Amount:** 1 award of $1,000

### Leroux Bursaries [I3535]

Established by Mr. Hector Leroux, O.A.C. ’44, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Mr. J.H. Leroux with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** O.A.C. degree students in the B.Sc.(Agri.), B.Sc., B.Comm. or B.Sc.(Env.) programs with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** Several awards of varying amounts

### Madison Gough Memorial Bursary [I3103]

Established by the friends and family of Madison Gough, a gentle, kind spirit who was inspired by nature, animals, or music and passionate about acceptance of difference. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Bob Gough and Laura Ladouceur  
**Qualification(s):** Students registered in any program who have demonstrated financial need.  
**Amount:** 1 award of $1,000

### Marie Hardacre Bursary [I3548]

Established by Mrs. A. Marie Hardacre, MAC DHE 1930 for students in CSAHS with a preference to female students registered in the Department of Family Relations and Applied Nutrition. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Mrs. A. Marie Hardacre with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students registered in any academic program in the College of Social and Applied Human Sciences with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 1 award of $5,000

### Mary L. Whetlock Bursaries [I3524]

Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Estate of Mary L. Whetlock with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 13 awards of $2,000

### Métis Nation of Ontario Bursary [I3092]

The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and a statement confirming Métis status and include your card number.

**Donor(s):** Métis Nation of Ontario  
**Qualification(s):** Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.  
**Amount:** 1 award of $1,000

### Murray P. And Florence L. Hannah Bursaries [I3571]

Preference will be given to students from the County of Northumberland. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Estate of Florence Hannah with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** OAC students registered in the BSc(Agr) or the BSc(Env) program who have completed a minimum of 4.0 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** Several awards of varying amounts

### Norma Valeriote International Student Bursaries [I3009]

Preference given to a student from a country of focus as defined by CIDA (Canadian International Development Agency). Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.

**Donor(s):** Mrs. Norma L. Valeriote  
**Qualification(s):** International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.  
**Amount:** Several of varying amounts

### O.A.C. '38 Lloyd Minshall Bursaries [I3529]

Established by O.A.C. ’38 Alumni, with the assistance of the Ontario government's OSOTF program, to recognize the many contributions of Lloyd Minshall to his classmates and to O.A.C. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** O.A.C. ’38 Alumni with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** Several awards of varying amounts
IX. Scholarships and Other Awards, Bachelor of Commerce

O.A.C. ’55 Access Bursaries [I3517]
Provided by the Class of O.A.C. ’55 with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): O.A.C. Class of ’55 with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students at any semester level in an O.A.C. degree program or students enrolled in the B.ENG. program with demonstrated financial need and a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).
Amount: several awards of varying amounts

O.A.C. ’57 Bursaries [I3518]
Provided by the Class of O.A.C. ’57 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

Donor(s): O.A.C. ’57 and the O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: several awards of varying amounts

O.A.C. Alumni Foundation Access Bursaries [I3533]
Provided by the O.A.C. Alumni Foundation, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

Donor(s): O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: several awards of varying amounts

OAC Student Aid Bursary [I3590]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Anonymous with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any OAC Undergraduate Degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: several awards of varying amounts totalling $8,000

Ontario Agri Business Association Degree Bursaries [I3502]
Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter (no more than two pages) outlining your involvement in extracurricular and/or community activities you have been involved in during their studies in the program. Selection will be based on financial need. ACCESS AWARD.

Donor(s): Ontario Agri Business Association with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in the B.Sc. (Agr.) program or in the B.Comm. with a major in Food and Agricultural Business. Preference will be given to students involved in extracurricular and/or community activities during their studies in the program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 3 awards of $1,000

Ontario Co-operatives R.P. Forshaw Bursary [I3013]
The Co-operatives, Credit Unions, and friends of Prof. R. P. Forshaw have established this bursary. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7 and a letter indicating membership of a co-op or credit union.

Donor(s): The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw
Qualification(s): Undergraduate students who have financial need. Preference may be given to candidates who have been or are members of a co-operative or credit union.
Amount: 1 award of $400

Ontario Federation of Agriculture Bursaries [I3520]
Provided by the Ontario Federation of Agriculture and the O.A.C. Alumni Foundation with the assistance of the Ontario government's OSOTF program. Apply with a letter indicating 4H and/or rural community involvement and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. To be considered for this award you must indicate it on our N.A.F. and include a statement outlining your extracurricular activities. ACCESS AWARD

Donor(s): Ontario Federation of Agriculture with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. students with demonstrated financial need enrolled in the B.Sc.(Agr.), B.Comm., B.Sc. or B.Sc.(Env.) programs. Preference will be given to students from farm families who have participated in 4H and/or rural community activities. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

Ontario First Generation Bursary [I3062]
The Ministry of Advanced Education & Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not completed postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.

Donor(s): Ministry of Advanced Education & Skills Development (MAESD)
Qualification(s): Students registered in any program who are first generation students, Ontario residents (as defined by OSAP) and who have demonstrated financial need.
Amount: several awards ranging in values from $1,000 to $3,500

Ontario Grape Growers Bursary [I3033]
Offered by the Ontario Grape Growers Action Committee. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): The Ontario Grape Growers Action Committee
Qualification(s): Students with good academic standing in semesters 3 to 6 of a degree program or semesters 3 to 4 of a diploma program administered by O.A.C., and demonstrated need of financial assistance.
Amount: Several of various amounts

Ontario Pork (Degree) Bursary [I3049]
Provided by Ontario Pork Producers' Marketing Board. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement indicating interests in pork production to Student Financial Services by October 7.

Donor(s): Ontario Pork Producers' Marketing Board
Qualification(s): B.Sc.(Agr.) and B.Comm., Agricultural Business major, students with demonstrated financial need who have completed semester 4 and who have satisfactory academic standing and an interest in pork production.
Amount: 1 award of $500

Robert Auger Humanitarian Bursary [I3058]
Established in memory of Bob Auger, a former Associate Registrar at the University of Guelph. It is intended as an emergency fund to assist students who unexpectedly find themselves in difficult financial situation who could benefit from receiving a grocery voucher. To be considered, students must have completed a Financial Aid Assessment form and arrange an appointment with a Financial Aid Counsellor. Appointments can be made by calling 519-824-4120 extension 58715.

Donor(s): Family and friends of Robert Auger
Qualification(s): Students registered in any degree program with an unexpected financial emergency.
Amount: Several grocery vouchers or book vouchers
<table>
<thead>
<tr>
<th>Bursary Name</th>
<th>Qualification(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotiabank Bursary [I3532]</td>
<td>Established by Scotiabank, with the assistance of the Ontario government's OSOTF program, to assist students with financial need to continue their studies as full-time students. Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td>2 awards of $1,500</td>
</tr>
<tr>
<td>Shirley Endean Bursaries [I3570]</td>
<td>These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD</td>
<td>Several awards of varying amounts</td>
</tr>
<tr>
<td>Student Financial Services Bursary [I3107]</td>
<td>The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. ACCESS AWARD.</td>
<td>Several awards up to a maximum of $6,000</td>
</tr>
<tr>
<td>T.K. Warley Bursaries [I3510]</td>
<td>Established by O.A.C. Alumni Association, with the assistance of the Ontario government's OSOTF program, to recognize Professor T.K. Warley's significant contribution to the O.A.C. Alumni Foundation and to students through teaching and promotion/development of &quot;Experience Agriculture.&quot; A degree student may receive this bursary twice. Apply by letter outlining extracurricular involvement and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.</td>
<td>Several awards of varying amounts</td>
</tr>
<tr>
<td>Tony and Nan Legris Bursary [I3072]</td>
<td>Established by Rosemary Legris in memory of her parents, Tony and Nan Legris, Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td>1 award of $1,200</td>
</tr>
<tr>
<td>Uffelmann Connor Family Bursary for Indigenous Students [I3109]</td>
<td>Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7th to Student Financial Services (<a href="mailto:awards@uoguelph.ca">awards@uoguelph.ca</a>) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Métis or Inuit). ACCESS AWARD.</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Uffelmann Connor Family First Generation Bursary [I3108]</td>
<td>Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>University of Guelph Access Bursaries [I3522]</td>
<td>Established by the University of Guelph Alumni Association, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td>Several awards of $500, Several awards of $2,000</td>
</tr>
<tr>
<td>University of Guelph Alumni Association Access Bursaries [I3523]</td>
<td>The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Students should apply to the International Student Advisor by Nov. 1 for the fall semester, March 1 for the winter semester, and July 2 for the summer semester with a completed International Student Financial Need Assessment Form (N.A.F.). If students have an emergency situation, please contact the International Student Advisor, in Student Life, University Centre, Level 3. ACCESS AWARD.</td>
<td>1 award of $1,250</td>
</tr>
<tr>
<td>University of Guelph International Bursary [I3048]</td>
<td>Established by the University of Guelph International Bursary, to support students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.</td>
<td>Several awards of varying amounts</td>
</tr>
<tr>
<td>University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [I3047]</td>
<td>The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. ACCESS AWARD.</td>
<td>Several awards to a maximum of $2,000</td>
</tr>
<tr>
<td>University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]</td>
<td>The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. ACCESS AWARD.</td>
<td>Several awards up to a maximum of $6,000</td>
</tr>
</tbody>
</table>
IX. Scholarships and Other Awards, Bachelor of Commerce

### University Student Assistance Program [I3057]

These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).

**Amount:** Several awards of various amounts to a maximum of $1,000

### Virginia Conner Memorial Bursary [I3110]

This bursary was created to recognize the farming contributions and community spirit of Mr. Barlow. Apply by October 7th to the Student Financial Services with a completed Financial Need Assessment form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Selection will be based on financial need.

**Donor(s):** Estate of Virginia Conner  
**Qualification(s):** Students registered in any program offered by OAC with demonstrated financial need.

**Amount:** several awards of up to $2,000

### William Barlow Memorial Bursary [I3101]

This bursary was created to recognize the farming contributions and community spirit of Mr. Barlow. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Mr. William Barlow  
**Qualification(s):** Students registered in any program within the Ontario Agricultural College at the University of Guelph who is from Durham Region, Northumberland County, or County of Victoria including City of Kawartha Lakes and has demonstrated financial need.

**Amount:** 1 award of $3,000

### In-course Travel Grants

#### F.E. Wolff International Scholarship [T0313]

The late Frank E. Wolff was a faculty member and a graduate of O.A.C. He was active in the O.A.C. Alumni Foundation and in the establishment of the O.A.C. Alumni Foundation. This scholarship fund was established in memory of Frank E. Wolff, Mr. A.O. Wolff and family. As a faculty member, he studied the techniques of artificial insemination of cattle in Denmark and upon his return in 1939, employed these techniques in the O.A.C. herd. Apply to the OAC Awards Office by February 1 with a letter outlining the cost of your trip for this course. Please be sure to include your name, student ID number, your program of study and the award you are applying to on your application. Please email your application to oacaward@uoguelph.ca and include the award name and ID number in the subject line.

**Donor(s):** Mr. A.O. Wolff (Sr.)  
**Qualification(s):** Students registered in any program offered by OAC with a minimum 70% cumulative average and who are registered AGR*2500 (Field course in International Agriculture with field trip to Costa Rica).

**Amount:** several awards of varying amounts

#### O.A.C. ‘54 International Study Scholarship [T0586]

Established in memory of Beth Duncan to support students participating in an exchange program, study abroad semester, or a field trip course. Submit a letter (of not more than two pages) outlining the intended international study program, reasons for choosing the program and the anticipated benefits of participation. Letters should also include a brief summary of extracurricular and student related activities. Letters of reference will be considered. Apply to the O.A.C. Awards Office by May 15, no more than two semesters prior to the commencement of the program.

**Donor(s):** Class of O.A.C. ’54  
**Qualification(s):** Currently registered students in O.A.C. who are Canadian citizens or permanent residents with a minimum 75% cumulative program average who intend to participate in an exchange program, semester abroad, or field trip course.

**Amount:** 2 awards of $3,000
Bachelor of Computing

Please refer to the General Statement on Awards for:

- Award Eligibility
- ACCESS Awards Eligibility
- Ontario Student Opportunity Trust Fund (OSOTF) Program
- How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

Entrance Scholarships

Angelo and Frank Agro Undergraduate Scholarship [E0520]

These scholarships are provided by the Agro Scholarship Fund. Apply, by April 15, to Student Financial Services (awards@uoguelph.ca), with a one to two-page, point-form listing of 4-H activities. This list should describe current or past activities within 4H and the position titles/names, if applicable. Attach a reference letter from a 4H club official. These scholarships will be awarded to the students demonstrating the most active involvement with 4H clubs. The committee will consider any appropriate elements, such as the length of membership in 4H, leadership role(s) in support of 4H, creativity in 4H outreach, and coordination with other rural and academic activities. Credit will be given to those who have achieved in county, provincial and national 4H competitions. Recipients must maintain full-time studies and at least a 70% program average each year for continuation of the award.

Donor(s): The Frank Agro Estate
Qualification(s): Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 - 4H projects.
Amount: 7 awards of $7,000 (payable over 4 years of study)

Board of Governors' Scholarships [E0317]

This scholarship is considered one of the University of Guelph's most prestigious entrance scholarships with only 25 awards being awarded each year. Recipients of this scholarship are entering their program with one of the highest admission averages of that cohort. The scholarship will be renewed each year provided recipients remain registered in full-time studies and achieve a minimum 80.0% average in their previous academic year of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80.0% or better average in the previous academic year of full-time study. Payments lost cannot be added to the end of the award period. This award cannot be held with the President's, Lincoln Alexander Chancellors' or Chancellors' Scholarships. Application is not required.

Donor(s): Board of Governors
Qualification(s): Academically outstanding entering students with the highest admission averages of the entering cohort.
Amount: 25 awards of $20,000 (payable over 4 years of study)

Chancellor's Scholarships [E0688]

This scholarship was established in 2009 in honour of current and past University of Guelph Chancellors and is considered one of the most prestigious entrance awards offered by the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the President's Scholarships, the Lincoln Alexander Chancellors' Scholarships, or the Board of Governors' Scholarships.

Donor(s): University of Guelph
Qualification(s): Students entering a degree program with a minimum 90% admission average who have taken leadership roles in activities that demonstrate an interest in international relations and development, or leadership roles in activities relating to arts and culture and demonstrate the potential to become a leader in society.
Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus $9,000 stipend for summer research assistantship)

December 6th Memorial Scholarship [E0005]

This scholarship, established by the Faculty Association, is awarded in memory of the fourteen women murdered in December 1989 at Ecole Polytechnique and is intended to attract women to a profession that is largely comprised of men. The recipient will be selected on the basis of academic performance. For continued eligibility beyond semester 1, the student must maintain a minimum of 70% cumulative average and full-time studies. Application is not required.

Donor(s): University of Guelph Faculty Association
Qualification(s): Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Engineering and Physical Sciences.
Amount: 1 award of $2,250 ($750 in each of semesters 1, 3 and 5)

Earl B. MacNaughton Entrance Scholarships [E0172]

Established by friends, faculty, staff, alumni and students of the University to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Emphasis during selection will be given to academic achievement in high school science and mathematics. Application is not required.

Donor(s): Earl B. MacNaughton
Qualification(s): Students with a high academic standing, entering an honours program in the College of Engineering and Physical Sciences.
Amount: 4 awards of $2,000

Ed Carter/University of Guelph Faculty Association Scholarship [E0292]

Award is payable at $750 per annum in the student's 1st, 3rd, and 5th semester levels, provided a cumulative average of at least a 70% is maintained. To receive the final payment, the recipient would normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.

Donor(s): University of Guelph Faculty Association
Qualification(s): Students entering any undergraduate degree program at the University of Guelph from Wellington county.
Amount: 1 award of $2,250 ($750 in the 1st, 3rd, and 5th semesters)

Gordon W. Innes Scholarship [E0140]

Application is not required.

Donor(s): Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.
Qualification(s): Student entering any degree program from Oxford County with the highest admission average.
Amount: 1 award of $1,000

Hardy International Student Scholarship [E0659]

Selection is based on the assessment of the student's admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.

Donor(s): Mrs. Marion Hardy
Qualification(s): Full-time international students (defined as paying the international student tuition and fees) entering any degree program.
Amount: 1 award of $2,000

International Student Entrance Scholarships [E0408]

In support of the University's strategic direction of internationalism, entrance scholarships are available each Fall semester to the top international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all relevant documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.

Donor(s): University of Guelph
Qualification(s): Students on a "student visa" entering an undergraduate program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.
Amount: Several awards ranging in value from $5,500 - $8,500

J.D. MacLachlan Scholarship [E0170]

Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.

Donor(s): The J.D. MacLachlan Trust
Qualification(s): Students entering any degree program at the University of Guelph.
Amount: 1 award of $1,500

Jack and Lillian MacDonald Scholarship [E0379]

Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

Donor(s): Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald
Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).
Amount: 1 award of $900
## IX. Scholarships and Other Awards, Bachelor of Computing

### Lincoln Alexander Chancellor’s Scholarships [E0689]

Established in 2001 in honour of Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This award cannot be held with the President’s Scholarships, the Chancellors' Scholarships or the Board of Governors’ Scholarships.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Many Donors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.</td>
</tr>
<tr>
<td>Amount:</td>
<td>2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)</td>
</tr>
</tbody>
</table>

### McArthur-Humphries Scholarship [E0183]

An equal number of awards are available to students from each county. In the case of insufficient eligible applicants from one county, the awards will be given to eligible applicants from the other county. These scholarships are awarded to students with the highest admission averages. Application is not required.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Wilhelmina McArthur-Humphries Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students entering any degree program with a minimum 75% admission average from Lanark and Wellington Counties.</td>
</tr>
<tr>
<td>Amount:</td>
<td>8 awards of $1,000</td>
</tr>
</tbody>
</table>

### Mieso Denko Memorial Scholarship [E0810]

Established in memory of Mieso Denko as a tribute to his life’s work in research and education. The scholarship will be awarded to the student with the highest admission average. No application is required.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Family, Friends, and Colleagues of the late Mieso Denko</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students entering the Bachelor of Computing program.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

# President’s Scholarship [E0238]

Established in 1987 in honour of their donors or distinguished members of the University and are considered one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the Chancellor’s Scholarships, the Lincoln Alexander Chancellor’s Scholarships or the Board of Governors’ Scholarships.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>A number of President’s Scholarships have been named in honour of the following people and/or donors: Cecil H. Franklin and Ingrid Franklin, Charles S. Humphrey, Kathleen and Frederick Metcalf, Burton C. Matthews, Jack R. Longstaffe, Lillian Stewart Usher, and Ingrid Franklin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and/or communities.</td>
</tr>
<tr>
<td>Amount:</td>
<td>8 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)</td>
</tr>
</tbody>
</table>
Project Hero Scholarship [E0979]

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph

**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

Ted Morwick Scholarship [E0796]

Established by Ted Morwick, honorary alumni. The student with the highest admission average will be selected. This award is conditional on maintaining a 80% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify. (i.e. The student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year.) If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with the Chancellors’, President’s or Board of Governors’ Scholarships. No application is necessary.

**Donor(s):** Mr. Edward (Ted) Morwick

**Qualification(s):** Students entering any degree program in the College of Arts.

**Amount:** 4 award of $8,000 (payable over four years.)

University of Guelph Entrance Scholarships [E0291]

_The value_ of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student’s financial account in two equal payments in the fall and winter semesters. Application is not required.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering their first year of post-secondary studies for the first time with a minimum 85.0% admission average.

**Amount:** Several awards of $2,000, Several awards of $3,000

W. Penri Morris Memorial Scholarship [E0430]

Established by the family in memory of Penri Morris, who was killed World War II action in 1944 at the age of 21. Penri grew up on the family fruit farm near Forest, Ontario. After graduating from high school, he joined the Royal Canadian Air Force and was attached to the Royal Air Force Bomber Command as a navigator at the time of this death. Awarded to the student with the highest cumulative academic performance above 75% in all courses of the last year in high school study (full-time or equivalent study). Application is not required.

**Donor(s):** Prof. Rosalina Morris

**Qualification(s):** Students entering first year of any undergraduate program from North Lambton Secondary School in Forest, Ontario, in their absence, from Lambton County, and their absence, from Ontario.

**Amount:** 1 award of $1,000

Walter and Halina Slabikowski Scholarship [E0766]

This scholarship was established in memory of Walter and Halina Slabikowski who sent their first generation Canadian born children to university to enrich their lives and provide them with greater opportunities. The award will be given to the student with the highest admission average. The residence deposit must be received by published deadline date. Submit by email to awards@uoguelph.ca your full name, student ID number and a statement attesting to your parents’ place of birth and non participation in post secondary education by April 15th.

**Donor(s):** Irene Thompson and Slabikowski Family

**Qualification(s):** Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary studies.

**Amount:** 1 award of $1,000

Waterloo-Wellington Science & Engineering Fair (WWSEF) Scholarship [E0619]

Established to recognize excellence of the project submissions and encourage students to pursue university studies at the University of Guelph.

**Donor(s):** University of Guelph

**Qualification(s):** Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.

**Amount:** various awards of $1,000

Entrance Scholarships with Financial Need

Ada Lovelace Scholarship in Computer Science [E1088]

Students complete the online Financial Need Assessment Form (N.A.F.) application once they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and no later than April 15.

**Donor(s):** Ethan Buvhman

**Qualification(s):** This award was established in honour of Ms. Ada Lovelace, one of the first female computer scientist and a trailblazer for women in the industry. This award aims to carry on Ada’s vision to increase female student enrolment into computer science based programs. Female students entering any program offered by the School of Computer Science with a minimum 80% admission average and demonstrated financial need.

**Amount:** 1 award of $1,000

Bill Klopp Memorial Scholarship [E0150]

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by April 15. Students should complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

**Donor(s):** Ross and Mary Lou Klopp

**Qualification(s):** Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.

**Amount:** 1 award of $500
Devine Family Scholarships [E4542]

Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of Governors member, with the assistance of the Ontario government’s OTSS program. These scholarships will be given out every four years, unless the incumbent fails to qualify. The scholarship is renewed in years two, three, and four with continued demonstrated financial need and full-time registration; students are required to register for no less than 2.0 credits each semester. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the “Devine Family Scholarship Application”. Deadline to submit the complete application (both parts, the E.N.A.F. and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenable with the President’s Scholarships, the Lincoln Alexander Chancellor’s Scholarships or the Chancellors’ Scholarships, but can be held with all other entrance awards. ACCESS AWARD.

Donor(s): Mr. Peter J. Devine with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students who are Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person entering any University of Guelph undergraduate degree program with a minimum 80% admission average. Preference will be given to students who are Black Canadians. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: up to 2 awards of $50,000 each (payable over 4 years of study)

Interhall Council Entrance Scholarship [E0636]

Established by the Interhall Council, the residence student government that programs, advocates and represents residence students to administration and Student Housing Services (www.interhall.ca), to ensure that the residence experience remains accessible to students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15.

Donor(s): Interhall Council
Qualification(s): Students entering a full-time undergraduate degree program with a minimum 85.0% admission average, residing in residence during first year on the Guelph campus with demonstrated financial need and demonstrated strong leadership ability.
Amount: 5 awards of $1,000

Kenneth O. Hammill-Blount Canada Scholarship [E4356]

Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government's OSOTF program. Selection will be based on greatest financial need from the President’s, Lincoln Alexander Chancellor's or Chancellor's' Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President’s, Lincoln Alexander Chancellor's or Chancellor's Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. ACCESS AWARD.

Donor(s): The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Entering students who have applied for the President’s, Lincoln Alexander Chancellor's or Chancellor's Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $9,600 (payable in 8 payments of $1,200)

L. Norman Gibbins Microbiology Scholarship [E4392]

Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government's OTSS program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): Family, friends and colleagues of Norman Gibbins with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students entering the Microbiology major in the B.Sc. program with a minimum 80% admission average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $2,500

P.A.J. Clarke Family Scholarship [E0381]

Paul and Aileen Clarke and their family established the endowment for this entrance scholarship in honour of Paul’s father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining extracurricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not a requirement. This award is not tenable with the President’s Scholarships or Lincoln Alexander Chancellor’s Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

Donor(s): Paul and Aileen Clarke
Qualification(s): Students with a minimum 80% average with a record of leadership and community participation. Preference will be given to candidates from Blenheim district or Kent County who were raised, have worked, on a farm.
Amount: 1 award of $12,000 (payable over 4 years)

Rol-Land Farms Scholarships [E4519]

Established by Rol-Land Farms, with the assistance of the Ontario government's OSOTF program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD.

Donor(s): Rol-Land Farms with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students entering a degree program with demonstrated financial need and a minimum 80% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 13 awards of $2,000

Elizabeth Maud Hunter (Shier) Bursary [E3575]

This award was created to assist first year students in obtaining a post secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing similar circumstances. Preference given to a student from the County of Brock, Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F.) for Entrance Awards. ACCESS AWARD

Donor(s): The Estate of the Late William Henry "Harry" Hunter with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students entering any degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 3 awards of up to $4,500

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
First Year Student Residence Bursary [E3066]
These 5 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the on-line Financial Need Assessment Form for Entrance Awards by April 15.

**Donor(s):** Student Housing Services  
**Qualification(s):** Students entering any degree program with demonstrated financial need.  
**Amount:** 5 awards of $500

Harvey Graham Bursary [E3030]
Provided by Harvey Graham (O.A.C. '39). Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a working farm and complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

**Donor(s):** Harvey Graham, O.A.C. '39  
**Qualification(s):** Students entering any degree program who come from a working farm and who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.  
**Amount:** 1 award of $1,500

International Student Entrance Bursaries [E3043]
In support of the University’s strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students entering an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar’s Entrance Award Application to Student Financial Services.

**Donor(s):** University of Guelph  
**Qualification(s):** Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.  
**Amount:** Several awards ranging in value from $1,000 to $3,000

Registrar’s Entrance Bursaries [E3084]
Established by the University of Guelph to support entering undergraduate students with identified financial need. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Bursary, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph  
**Qualification(s):** Students entering any degree program with a minimum registration of 1.5 credits and demonstrated financial need.  
**Amount:** 500 awards of $4,000

Robert Arthur Stewart Bursaries [E3272]
Established in memory of Mrs. Elsa H. Stewart of Pakenham, Ontario. Mr. Stewart graduated from the Ontario Agricultural College in 1933 and Mrs. Stewart from Macdonald Institute in 1932. Applicants for these bursaries should have a good academic record and an active interest in community affairs. A letter from the student and a recommendation from the County agricultural representative or the secondary school principal should be sent to Student Financial Services by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

**Donor(s):** The Estate of Mrs. H. Stewart  
**Qualification(s):** Students from the Ontario Counties of Lanark and Renfrew, and the Regional Municipality of Ottawa-Carleton, entering the 1st semester of a degree program at the University of Guelph.  
**Amount:** 14 awards of $1,000

Steven Jones Memorial Bursaries [E3077]
Established by Mr. and Mrs. Jones in memory of their late son, Steven Jones (B.Comm. '97). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F) to Student Financial Services by April 15. Selection will be made on demonstrated financial need.

**Donor(s):** Mr. Harry Jones  
**Qualification(s):** Students entering any degree program with demonstrated financial need.  
**Amount:** several awards of $2,000

University of Guelph Accessibility Bursaries [E3038]
Established by the University of Guelph to support students with substantial demonstrated financial need. In addition, students will be automatically approved for to participate in the work-study program conditional on the student securing a work-study approved position on campus. Participating in the work-study program is not required to hold this bursary. Payments of this award and the eligibility to participate in the work-study program are conditional upon the recipient receiving funding through their provincial/territorial and/or federal student loan assistance program and registration in a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F Scholarship offers will be made in May. This award is not tenable with the Registrar’s Entrance Bursary, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph  
**Qualification(s):** Students entering any degree program with demonstrated financial need and a minimum registration of 1.5 credits.  
**Amount:** 200 awards of $14,000 (payable over 4 years) plus Work-study approval

Veriphy Skincare Scholarship for Women in STEM [E1092]
Supporting women and the pursuit of education in STEM are intrinsic values for the Veriphy founders. To support this commitment this scholarship has been established through the University of Guelph, where PhytoSpheric™ was discovered. Apply by completing the Financial Need Assessment Form for Entrance Awards (E.N.A.F) by April 15. Selection will be based on greatest financial need.

**Donor(s):** Veriphy Skincare Inc.  
**Qualification(s):** Female students entering a program offered by the College of Engineering and Physical Sciences with a minimum 80.0% admission average and demonstrated financial need.  
**Amount:** 1 award of $1,000

In-course Scholarships
Aboriginal Student Engagement Scholarship [I0922]
Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA’s commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status), Métis or Inuit and outline volunteer/leadership experience within the Aboriginal community. The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

**Donor(s):** Aboriginal Student Association  
**Qualification(s):** Students registered in any program who self-identify as First Nation (status and non-status), Métis or Inuit, who are engaged in the Aboriginal community either in their home community or at the University of Guelph.  
**Amount:** 1 award of $1,000
### Adknown Inc. Scholarship [I1118]
These awards have been generously provided by Adknown Inc., a leading web and app publisher with a passion for ad-tech, proudly based in downtown Guelph. Selection will be based on demonstrated achievements or accolades in one or more of the areas of leadership, innovation or impact of one or more areas of volunteerism, either on or off campus. Students must submit a paper application to the SoCS Office Clerk by May 15th with a letter of no more than 400 words, outlining achievements in the areas of leadership, innovation or volunteerism, either on or off campus. The award can be held only once.

**Donor(s):** Adknown Inc.

**Qualification(s):** Students registered in the Computer Science or Software Engineering majors offered by the School of Computer Science who have completed between 12.0 and 15.0 credits, have a minimum 70% cumulative average, and who have demonstrated leadership, innovation or volunteerism, either on or off campus.

**Amount:** 2 awards of $2,500

### Alumni House Call Centre Scholarship [I1120]
Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15th with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

**Donor(s):** Former Employees of the Alumni House Call Centre

**Qualification(s):** Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.

**Amount:** 1 award of $1,000

### Amina Kapadia Memorial Scholarship [I1093]
This scholarship was created and funded by the Kapadia Family and Department of Chemistry, in the memory of Ms. Amina Kapadia who died with her parents in a tragic house fire on February 14, 2017.

**Donor(s):** The Kapadia Family

**Qualification(s):** Student registered in the Biological and Pharmaceutical Chemistry major who completed CHEM*1040 in the previous academic year (fall/winter/summer).

**Amount:** 1 award of $1,000

### Bill Taylor Memorial Scholarship [I0280]
Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.

**Donor(s):** AMF Canada Ltd.

**Qualification(s):** Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or intercollegiate athletics.

**Amount:** 1 award of $1,000

### Braithwaite Business Scholarships [I0827]
Named in honour of Professor Bill Braithwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15th with a resume and 500-word statement describing why business courses, in addition to their major, will benefit their future career. Shortlisted applicants may be invited for an interview with the LANG Awards Committee. Selection is based on the student who best describes why taking business courses, in addition to their major, will benefit their future career. Students may hold this award only once.

**Donor(s):** Anonymous

**Qualification(s):** Students registered in any degree program, within the exception of B.Com., who have successfully completed 1.0 credits towards the Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150 Introduction to Canadian Business or students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) who have completed 1.0 credits towards the minor.

**Amount:** 10 5000 (payable over 2 semesters)

### Bridge Builder Scholarship [I1050]
The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Apply to Student Financial Services by May 15th with a one page letter outlining the volunteer activities that lead to social connections, breaking down barriers, and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people through one or more of the following: Civic engagement by facilitating community engagement, social integration and volunteerism to promote inclusion for immigrant and ethno-cultural communities; Social connections by promoting social connections and employment networking, including programs that reduce barriers and increase support for vulnerable groups; Education and empowerment by promoting intercultural understanding and decision-making. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.

**Donor(s):** Muslim Society of Guelph

**Qualification(s):** Students registered in any program who, through volunteer activities in the local community, have demonstrated a passion and commitment for building bridges in one or more of the following ways: facilitating social connections; breaking down barriers; and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people.

**Amount:** 1 award of $1,000

### CEPS-SC Student Leader Scholarship [I0938]
Established to recognize the student who demonstrates the most significant contributions to enhancing and promoting the physical and engineering sciences at the University of Guelph, through volunteer leadership roles. Apply to the CPES Awards Committee (cepsada@uoguelph.ca) by May 15 with a one page letter outlining volunteer/leadership contributions and a reference letter indicating what contributions they made to promoting and enhancing physical and engineering sciences.

**Donor(s):** College of Engineering and Physical Sciences Student Council

**Qualification(s):** Students registered in any program offered by the College of Engineering and Physical Sciences who have completed a minimum of 4.0 credits with demonstrated involvement in college-related volunteer/leadership activities.

**Amount:** 2 awards of $1,000

### CFRU Volunteer Scholarship [I0215]
The award is presented to the student who has made the most significant contribution to the operation and goals of CFRU. Apply to Student Financial Services by May 15 with a letter describing the contributions made as a volunteer with CFRU and how those contributions have supported the operation and furthered the goals of CFRU.

**Donor(s):** CFRU Alumni

**Qualification(s):** Students registered in any degree program with a minimum cumulative average of 70% who have volunteered at CFRU for at least one year.

**Amount:** 1 award of $1,000

### Christina Victoria Kenny Memorial Scholarship [I1018]
The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.

**Donor(s):** Family and Friends of Vikki Kenny

**Qualification(s):** Students registered in any degree program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.

**Amount:** 1 award of $1,000

### Class of 1970 Scholarship [I0424]
Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.

**Donor(s):** Class of 1970: 25th Reunion Gift

**Qualification(s):** Outstanding student in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Deans’ Honours List.

**Amount:** 1 award of $1,400
College of Engineering and Physical Sciences Graduation Prize [C0075]
The winner will be selected in May from all students who have completed the program in the previous twelve months. Application is not required. One award of $1000 and a commemorative plaque.

Donor(s): College of Engineering and Physical Sciences
Qualification(s): Students who are graduating in June, or who have graduated in the previous Winter or Fall convocations and have completed from 14.75 to 17.75 credits including the core CIS courses required for year 2 with a minimum 80% cumulative average.

Amount: 1 award of $1,000, 1 Commemorative plaque

Collins Barrow Scholarship [I0040]
Offered by Collins Barrow, a national firm of Chartered Professional Accountants. Application is not required.

Donor(s): Collins Barrow - Wellington Dufferin District
Qualification(s): Students who have successfully completed the course ACCT*3330, Intermediate Accounting.

Amount: 1 award of $1,000

David F. Boyes Apiculture Scholarship [I0031]
Established in memory of David Boyes in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.

Donor(s): The Apiculture Club
Qualification(s): Students registered in any program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.

Amount: 1 award of $200

Deans’ Scholarships [I023]
This award was established by the Board of Governors’ in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.

Donor(s): Board of Governors
Qualification(s): Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.

Amount: 150 awards of $2,000

Dr. Charles Capstick Graduation Prize [C0558]
Awarded to the students who have achieved the highest and second highest cumulative averages at graduation. Application is not required.

Donor(s): School of Computer Science
Qualification(s): Students graduating from any program offered by the School of Computer Science in the June or the previous February or October Convocations.

Amount: 1 award of $500, 1 award of $300

Dr. James (Jim) Atkinson Scholarship [I025]
This award has been created through the generous contributions of many alumni and friends to recognize Dr. James (Jim) Atkinson’s influence at Guelph. As coach for over thirty years on both the men’s and women’s teams, as well as a respected faculty in the department of Animal and Poultry Science, Jim has had an impact on and off the field. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

Donor(s): Alumni and Friends of Dr. James (Jim) Atkinson
Qualification(s): One male rugby player and one female rugby player who is registered in any undergraduate program and who has achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student enrolled in the Ontario Agricultural College.

Amount: 2 awards of $1,000

Dr. James Linders Scholarship [I0559]
Awarded to the students with the highest average in year 3 core CIS courses in each of the two majors. Normally, one award will be made to a student in each major. If no qualified applicant is found in each major, both awards may be given within the same major. Application is not required.

Donor(s): School of Computer Science
Qualification(s): Students registered in the Bachelor of Computing degree program who have completed from 5.0 to 7.5 credits including the core CIS courses required for year 2 with a minimum 80% cumulative average.

Amount: 1 award of $1,000

Dr. Mary McLeish Scholarship [I0560]
Awarded to the students with the highest average in year 3 core CIS courses in each of the two majors. Normally, one award will be made to a student in each major. If no qualified applicant is found in each major, both awards may be given within the same major. Application is not required.

Donor(s): School of Computer Science
Qualification(s): Students registered in the Bachelor of Computing degree program who have completed from 5.0 to 7.5 credits including the core CIS courses required for year 2 with a minimum 80% cumulative average.

Amount: 1 award of $1,000

Dr. Ted Swart Scholarship [I0561]
These scholarships are awarded to the student with the highest average in Year 2 Computing and Information Science core courses in each of the two majors. Normally one award will be made to a student in each major. If no qualified applicant is found in each major, both awards may be given within the same major. Application is not required.

Donor(s): School of Computer Science
Qualification(s): Students registered in the Bachelor of Computing degree program who have completed from 5.0 to 7.5 credits including the core CIS courses required for year 2 with a minimum 80% cumulative average.

Amount: 1 award of $1,000

E.B. MacNaughton Convocation Prize [C0171]
Established by the College of Engineering and Physical Sciences to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application is not required. Students who have graduated from an honours program offered by the College of Engineering & Physical Sciences in the previous fall or winter semesters or will graduate in the upcoming summer semester.

Donor(s): The College of Engineering and Physical Sciences
Qualification(s): The College of Engineering and Physical Sciences nominate the winner.

Amount: 1 award of $1,000

Emmanuel & Kalliope Salamalekis Scholarship [I0987]
Awarded to the students with the highest average in year 3 core CIS courses in each of the two majors. Normally one award will be made to a student in each major. If no qualified applicant is found in each major, both awards may be given within the same major. Application is not required.

Donor(s): Dr. Anthony Vannelli and Voula Vannelli
Qualification(s): Students registered in any program offered by the College of Engineering & Physical Sciences who have completed a minimum of 5.0 credits and have demonstrated engagement in the community, preferably in a leadership role.

Amount: 1 award of $1,000

George A. Gray O.A.C. ’51 Varsity Scholarships [I0487]
Established in memory of George Gray, O.A.C. ’51, a Guelph football lineman and a great player of the game. Recipients will be selected based on demonstrated athletic and leadership qualities. Coaches will nominate students to the Athletics Awards Committee. Preference will be given to members of the varsity football team. Application is not required. Awarded in the fall semester.

Donor(s): Mrs. George A. Gray
Qualification(s): In-course student-athlete who is a current member of a varsity team and has achieved a minimum 70% average in the previous academic year.

Amount: 2 awards of $1,250
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Qualification(s)</th>
<th>Amount</th>
<th>Donor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governor General’s Medal [C0044]</td>
<td>Established by the Office of the Governor General of Canada. Application is not required.</td>
<td>2 awards of a Silver medal each</td>
<td>The Chancellery</td>
</tr>
<tr>
<td>Harry Barrett Memorial Scholarship [II046]</td>
<td>This award was established through a gift from the estate of Mr. Harry Barrett, a graduate of OAC from 1949. Selection will be based on the highest cumulative average. Apply by May 15th to Student Financial with a written explanation of the planned experiential learning opportunity. If there are no applications by May 15th, the scholarship will be given to the student with the highest grade in ZOO*4920 in the previous Fall offering.</td>
<td>1 award of $1,500</td>
<td>The Estate of Harry Barrett</td>
</tr>
<tr>
<td>Highdale Farms Scholarship [I0348]</td>
<td>Established by Mr. Arthur Spoerri, who has had a professional career as an Economist. The student with the highest program average will be selected for one award and the second recipient will have the highest cumulative average from the listed counties. In the event the student with the highest average is also from the listed counties, the student with the second highest average will be selected. A student cannot hold two Highdale Farm Scholarships at the same time. Application is not required.</td>
<td>2 awards of $5,000</td>
<td>Arthur Spoerri</td>
</tr>
<tr>
<td>International Undergraduate Scholarship [I0577]</td>
<td>Established through a student referendum approved by the undergraduate student body, to recognize international students' academic merit along with involvement/leadership activities during their enrollment at the University of Guelph. Apply to Student Financial Services, by May 15, with a letter indicating involvement/extracurricular activity since entry to the University. This award can only be held once by the student.</td>
<td>2 awards of $3,000</td>
<td>International Student Organization (ISO)</td>
</tr>
<tr>
<td>Jack and Lillian MacDonald Scholarship [E0379]</td>
<td>Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.</td>
<td>1 award of $900</td>
<td>Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald</td>
</tr>
<tr>
<td>John Eccles Scholarship [I0093]</td>
<td>Apply to Student Financial Services, by May 15, with a letter highlighting leadership abilities through participation on residence life. Providing a reference letter would be an asset.</td>
<td>1 award of $1,000</td>
<td>Student Housing Services</td>
</tr>
<tr>
<td>Johnson &amp; Johnson Diversity and Inclusion Scholarship in Science [I1007]</td>
<td>Apply by May 15th to the office of the Associate Dean Academic in the College of Biological Science with two supporting reference letters. Selection will be based on greatest demonstrated leadership to increase advocacy for diversity and inclusion in the community through positions held, extracurricular activities and involvement on campus and in the community as evidenced by two letters of reference. Leadership that increases advocacy for inclusion; creating an environment that is safe, positive, respectful and diverse; recognizes and celebrates the range of social identity groups that comprise the community. Students may hold this award only once.</td>
<td>1 award of $1,000</td>
<td>Johnson &amp; Johnson</td>
</tr>
<tr>
<td>Kenneth W. Hammond Scholarship [I0045]</td>
<td>Student with the highest grade in the course ENVS*2070 &quot;Environmental Perspectives and Human Choices.&quot; Application is not required.</td>
<td>1 award of $1,000</td>
<td>Kenneth W. Hammond</td>
</tr>
<tr>
<td>Kevin Durie Memorial Scholarship [I0653]</td>
<td>Established in memory of Kevin Durie, BA ’93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.</td>
<td>1 award of $1,000</td>
<td>Christine Blake-Durie</td>
</tr>
<tr>
<td>Kip Hunter Prize [I0139]</td>
<td>For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May 1</td>
<td>1 Book prize</td>
<td>Faculty, students and staff of the Philosophy Department</td>
</tr>
</tbody>
</table>

Last Revision: July 4, 2019
Lambda Foundation Scholarship in LBGT Studies [I0591]

This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LBGT peoples. Preference will be given to an applicant who is involved in the LBGT community as demonstrated by a record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a given student only once. Projects must have been completed or research proposals accepted within the past calendar year. Apply to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referencing involvement in the LBGT community and/or faculty support.

**Donor(s):** Lambda Foundation and other donors

**Qualification(s):** Students enrolled in a program with a thesis, a research essay, independent research project or course work programs pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.

**Amount:** 1 award of $1,000

Lange and Prokipcak Chemistry Scholarship [I0528]

This scholarship was established by Professor Gordon L. Lange, Professor Joe M. Prokipcak, friends and colleagues. Professors Gordon L. Lange and Joe M. Prokipcak were valued members of the chemistry Faculty who retired in 2001. Their excellence in teaching was recognized within the university and nationwide, winning them a total of eleven teaching awards. This scholarship will be awarded to the student with the highest average grade in CHEM*1040, 1050 and 2700. Application is not required.

**Donor(s):** Professor Gordon L. Lange, Professor Joe M. Prokipcak and friends and colleagues

**Qualification(s):** Student registered in any program offered by C.E.P.S who has completed CHEM*1040, CHEM*1050, CHEM*2700 and has completed a minimum of 10.0 credits up to a maximum of 14.75 credits.

**Amount:** 1 award of $1,000

Leonard Conolly Exchange Student Scholarship [I0446]

Established by students, faculty, staff and friends to honour Prof. Leonard Conolly, professor of drama, Chair of the Department of Drama, 1981-88, and Associate Vice-President Academic, 1988-1992. Apply to the Centre for International Programs by April 5, for visiting during the subsequent Fall or Winter semesters. Selection, by the Centre for International Programs, will be based on assessment of (a) a one-page submission describing the significance of the student visiting Guelph to the program of study at the partner exchange university (b) two faculty references of one-page each, and (c) consistent high performance in the course work completed, as documented by a transcript of program grades to date, submitted by the home university.

**Donor(s):** Students, faculty, staff and friends of Dr. Leonard Conolly

**Qualification(s):** Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).

**Amount:** 1 award of $1,000

Linda S. Allen Memorial Graduation Prize [C0914]

This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medallion, on the occasion of its second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant obstacles during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).

**Donor(s):** Brian Allen, Family, Friends and Colleagues of Linda S. Allen

**Qualification(s):** Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.

**Amount:** 1 award of $1,000

Marion McKenzie Scholarships for Outstanding Achievement in History [I0470]

These prizes have been established in memory of Marion McKenzie (1905-1994), a teacher who had a love of learning and a continuing curiosity about the world both past and present. These are awarded to the top student in each of the required core courses (History program (HIST*1050, HIST*2450)) in the previous academic year. Application is not required.

**Donor(s):** Dr. James Snell and Mrs. Leslie Snell

**Qualification(s):** Students who have completed one of the following core courses in History: HIST*1050 and HIST*2450. The recipient for HIST*1050 must have completed no more than 5.0 credits; the recipient for HIST*2450, no more than 10.0 credits and be in the specialization in History.

**Amount:** 2 awards of $1,000

McNeil Consumer Healthcare Diversity and Inclusion Scholarship in Science [I0947]

Established to acknowledge students who demonstrate leadership by increasing advocacy for diversity and inclusion in the community. Selection will be based on greatest demonstrated leadership to increase advocacy for diversity and inclusion in the community through positions held, extracurricular activities and involvement on campus and in the community as evidenced by two letters of reference. Leadership that increases advocacy for inclusion; creating an environment that is safe, positive, respectful and diverse; recognizes and celebrates the range of social identity groups that comprise the community. Apply by May 15th to the CBS, Associate Dean Academic Office (CBS@uoguelph.ca) within the letters of reference. Preference will be given to leadership in the Guelph community. Students may hold this award only once.

**Donor(s):** McNeil Consumer Healthcare

**Qualification(s):** Students registered in any program offered by the College of Biological Sciences or the College of Engineering and Physical Sciences with a minimum cumulative average of 80% who have completed 4.0 credits and who have demonstrated leadership to increase advocacy for diversity and inclusion in the community.

**Amount:** 1 award of $4,000

Michele and Maria Vannelli Scholarship [I0988]

Dr. Tony Vannelli, Dean of the College of Physical & Engineering Science from 2007 to 2016, and his wife, Voula, established this award in honour of Dr. Vannelli’s parents, Michele and Maria Vannelli. Selection will be based on high cumulative average and demonstrated engagement in the community, preferably in a leadership role supported by two letters of reference from individuals who or organizations that have knowledge of and can attest to that experience. Apply to the College of Physical & Engineering Science Awards Committee with a letter of application and two supporting reference letters from individuals or organizations attesting to community engagement experience by May 15th. This award is not tenable with the Emmanuel & Kalliope Salamaleks Scholarship (I0987).

**Donor(s):** Dr. Anthony Vannelli and Voula Vannelli

**Qualification(s):** Students registered in any program offered by the College of Physical & Engineering Science who have completed a minimum of 5.0 credits and have demonstrated engagement in the community, preferably in a leadership role.

**Amount:** 1 award of $1,000

Nathan Max Goldman Choir Scholarships [I0774]

Established in honour of Mr. Goldman, an OAC graduate (1945 and 1947) and former President of the Philharmonia Society at the University of Guelph. The scholarships will support two students who demonstrate outstanding leadership and vision in the Symphonic Choir and / or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high vocal achievement and choral leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required as a recommendation by Choir Director will be made to the SOFAM Awards Committee.

**Donor(s):** Mrs. Anne Goldman and the family of Nathan Max Goldman

**Qualification(s):** Students registered in any degree program who are currently a member of the University of Guelph Symphonic Choir and / or the Chamber Choir and have been a member of the University of Guelph Choirs for at least two years.

**Amount:** 2 awards of $1,000
**Nicholas Westwood Memorial Scholarship in Spectroscopy [10982]**

In recognition of Professor Nick Westwood's enduring contributions to the field of Molecular Spectroscopy, and his devotion to academic development and achievement at all levels, his family, friends and Department of Chemistry colleagues have established this award to honour his memory. Selection will be based on the highest grade in CHEM*2070 Structure and Spectroscopy. In the event of a tie, the award will go to the student with the highest cumulative average. Application not required.

**Donor(s):** Staff, faculty and friends of the Department of Chemistry  
**Qualification(s):** Students registered in any degree program with a minimum 80% cumulative average who have obtained a minimum of 80% in CHEM*2070 Structure and Spectroscopy.  
**Amount:** 1 award of $1,000

**Priscilla and Stanford Reid Trust Prize [10597]**

Established in honour of the first chair of the History Department and the Reid family. The Reid scholarship is endowed to the University of Guelph by Priscilla Reid to acknowledge the best paper written about the history of Presbyterianism and/or the Reformed tradition. Apply by April 1, with a copy of the paper and a covering letter including contact information to the Department of History Awards Chair.

**Donor(s):** Priscilla and Stanford Reid Trust Fund  
**Qualification(s):** Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.  
**Amount:** 1 award of $500

**Professional Staff Association Future Leader Scholarship [11132]**

This scholarship is provided to students whose leadership involvement makes a positive impact at the University of Guelph and/or the broader community. Apply by email to awards@uoguelph.ca by May 15 with one letter of reference and a personal statement (max 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average will be awarded. This award may not be held more than once.

**Donor(s):** The Professional Staff Association (PSA)  
**Qualification(s):** Students registered in any program who demonstrate involvement in leadership opportunities that result in positive community impact, and who are from the immediate family of full-time, part-time, contractual or retired members of the Professional/Managerial Group at the University of Guelph. Preference will be given to a student that has not received the Professional Staff Association Scholarship in the same year.  
**Amount:** 1 award of $1,500

**Professional Staff Association Scholarship [10628]**

This scholarship is provided to students with the highest cumulative average. Apply to Student Financial Services by May 15 with one letter of reference and a personal statement (max 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average will be awarded. This award may not be held more than once.

**Donor(s):** The Professional Staff Association  
**Qualification(s):** Full-time students who are from the immediate family, part-time or contractual Professional/Managerial Group employees of the University, and/or retired Professional/Managerial Group of the University of Guelph who have completed at least 5.0 credits and have a minimum 70% cumulative average.  
**Amount:** 1 award of $1,500

**Project Hero Scholarship [10797]**

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. ‘Dependent’ children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled children who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent's full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph  
**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.  
**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

**Resilience Scholarship (CEPS) [11226]**

Apply by January 31st to the School of Engineering Awards Committee with a resume and a 500-word statement describing how the applicant has overcome adversity, demonstrated resiliency, leadership and perseverance, and how their actions have had a positive impact on others. Selection will be based on: 1. Resilience in response to personal life challenges or adversity (e.g. physical disability, financial constraints, socio-economic barriers); 2. Effective leadership, as evidenced through positions held, extracurricular activities, involvement on campus/in school and/or in the community; 3. Positive impact, on others, the School of Engineering, the University of Guelph, or the broader community, as evidenced in a 500-word statement. In the event of a tie the student with the highest cumulative average will be selected. Award cannot be held more than once.

**Donor(s):** The Angel Gabriel Foundation  
**Qualification(s):** Female students registered in any program within the School of Engineering, who have assumed roles of leadership and who have demonstrated resilience in response to personal life challenges or adversity (e.g. physical disability, financial constraints, socio-economic barriers).  
**Amount:** 1 award of $5,000

**RWDI Scholarship for Engineering Student Athletes [11135]**

Established by Rowan Williams Davies & Irwin Inc. (RWDI), an engineering consulting firm specializing in the science of buildings and structures. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

**Donor(s):** RWDI  
**Qualification(s):** Current members of any Gryphon varsity team who are registered in any program offered by the School of Engineering and who have achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student-athlete who has volunteered in the community.  
**Amount:** 1 award of $3,500

**Sandbox Software Solutions Scholarship in Computing Sciences [10733]**

The scholarship will be awarded to the eligible student with the highest cumulative average. Preference will be given to female students. Application is not required.

**Donor(s):** Sandbox Software Solutions Inc.  
**Qualification(s):** Full time students registered in the Bachelor of Computing degree program or the Information Systems and Human Behaviour major of the Bachelor of Arts degree program who have completed at least 10.0 credits with a minimum cumulative average of 70%.  
**Amount:** 1 award of $1,000

*Last Revision: July 4, 2019*
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Amount</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
<th>Application Requirements</th>
<th>Selection Criteria</th>
<th>Other Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scotiabank Scholarships in Leadership [I0834]</strong></td>
<td></td>
<td>Students who have completed the Foundations of Leadership course (HROB*2010) and either completed the required 120 hours of leadership practice for the undergraduate Certificate in Leadership in a non-profit setting or are registered in the Leadership and Organizational Management major of the BComm program and have demonstrated exceptional leadership in a non-profit setting.</td>
<td>Scotiabank</td>
<td>Submit your application by email to: <a href="mailto:dom.awards@uoguelph.ca">dom.awards@uoguelph.ca</a>. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minorinng in Media and Cinema Studies and who have the highest GPA.</td>
<td>Awarded to an undergraduate student first, then to a graduate student if no undergraduate students apply. Award is $1,000.</td>
<td></td>
</tr>
<tr>
<td><strong>Sports Media and Sports Broadcasting Scholarships [I1035]</strong></td>
<td></td>
<td>Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas.</td>
<td>Rogers Media Inc.</td>
<td></td>
<td>Awarded to students involved in on campus activities in the sports media and/or sports broadcasting areas. Award is $2,500.</td>
<td></td>
</tr>
<tr>
<td><strong>Stephanie Wilken Volunteer Scholarship [I0449]</strong></td>
<td></td>
<td>Students registered in any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre.</td>
<td>Bev and Darlene Wilken</td>
<td>Abstract of the recipient’s volunteer activities, and a letter of recommendation from the organization in which the leadership practice took place. Letter should include the benefits both to the student and to the organization.</td>
<td>Award is $1,000. Students who have significantly engaged in humanitarian issues of global importance and provided them with a further opportunity to continue their work and build connections that lead to lasting change.</td>
<td></td>
</tr>
<tr>
<td><strong>Summerlee Humanitarian Scholarships [I0964]</strong></td>
<td></td>
<td>Students who have demonstrated a commitment to humanitarian efforts including but not limited to those affecting displaced persons, and populations affected by conflict and natural disasters through volunteer positions, prior employment and/or extra-curricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td>The Angel Gabriel Foundation</td>
<td>Abstract of the recipient’s volunteer activities, and a letter of recommendation from the organization in which the leadership practice took place. Letter should include the benefits both to the student and to the organization.</td>
<td>Award is $1,000. Students who have demonstrated a commitment to humanitarian efforts and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td></td>
</tr>
<tr>
<td><strong>Susan Travers Memorial Scholarship [I0975]</strong></td>
<td></td>
<td>Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumna/us of the University of Guelph or its founding colleges.</td>
<td>The staff in Alumni Affairs and Development and Friends</td>
<td>Students who have demonstrated a commitment to humanitarian efforts and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td>Awarded to students registered in any degree program. Award is $1,000.</td>
<td></td>
</tr>
<tr>
<td><strong>Thomas H. Peters Scholarship [I0233]</strong></td>
<td></td>
<td>Students who were accepted to the University of Guelph as a “mature student” and who are currently registered in any degree program.</td>
<td>Friends and associates of Thomas H. Peters</td>
<td>Application is not required.</td>
<td>Award is $1,000. Students who have demonstrated a commitment to humanitarian efforts and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td></td>
</tr>
<tr>
<td><strong>Toronto District Beekeeper’s Association Scholarship [I0285]</strong></td>
<td></td>
<td>Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas.</td>
<td>Mr. Jack Robinson</td>
<td>Students who have demonstrated a commitment to humanitarian efforts and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td>Award is $500. Students who have demonstrated a commitment to humanitarian efforts and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td></td>
</tr>
<tr>
<td><strong>United Steelworkers Local 4120 Scholarship [I0293]</strong></td>
<td></td>
<td>Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas.</td>
<td>United Steelworkers LU4120</td>
<td>Students who have demonstrated a commitment to humanitarian efforts and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td>Award is $500. Students who have demonstrated a commitment to humanitarian efforts and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td></td>
</tr>
<tr>
<td><strong>University of Guelph Alumni Legacy Scholarship [I0735]</strong></td>
<td></td>
<td>Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumna/us of the University of Guelph or its founding colleges.</td>
<td>Various donors c/o University of Guelph Alumni Association</td>
<td>Students who have demonstrated a commitment to humanitarian efforts and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td>Award is $1,000. Students who have demonstrated a commitment to humanitarian efforts and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td></td>
</tr>
<tr>
<td><strong>University of Guelph Retirees Association Scholarship [I0569]</strong></td>
<td></td>
<td>Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas.</td>
<td>University of Guelph Retirees Association (U.G.R.A.)</td>
<td>Students who have demonstrated a commitment to humanitarian efforts and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td>Award is $1,000. Students who have demonstrated a commitment to humanitarian efforts and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.</td>
<td></td>
</tr>
<tr>
<td>Scholarship Name</td>
<td>Qualification(s)</td>
<td>Amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]</td>
<td>Students registered in any program who have achieved a minimum of 80% cumulative average and participated in extracurricular activities.</td>
<td>1 award of $2,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W.C. Winegard Medal [C0311]</td>
<td>Student who has high academic standing and has made a substantial contribution to student life and to the university, particularly through involvement in and commitment to Senate activities.</td>
<td>1 award of a Gold medal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W.N. Vaughan Medal [C0299]</td>
<td>Student senator who has high academic standing and who has made a substantial contribution to student life and to the University, particularly through involvement in and commitment to Senate activities.</td>
<td>1 award of a Medal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-course Scholarships with Financial Need</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brian Kenneth Howard Memorial Scholarship [I4548]</td>
<td>Student registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td>1 award of $3,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.E.P.S. Dean’s Scholarship - ACCESS [I4527]</td>
<td>Students with demonstrated financial need, registered in an honours program offered by the College of Engineering &amp; Physical Sciences who have completed a minimum of 4.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEPS Computer Science ACCESS Scholarships [I4551]</td>
<td>Students registered in an honours program offered by the College of Engineering &amp; Physical Sciences who have completed 4.0 credits, with demonstrated financial need. Preference will be given to students in the BCOMP program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.</td>
<td>1 award of $1,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Guelph 175th Anniversary Scholarship [I0515]</td>
<td>Students who have completed 15.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
<td>2 awards of $1,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earl B. MacNaughton C.E.P.S. ACCESS Scholarships [I4172]</td>
<td>Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70.0% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.</td>
<td>1 award of $2,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eleanor Morgan &amp; Bill Archibald Scholarships [I4540]</td>
<td>The family of Eleanor and Bill Archibald, with the assistance of the Ontario government’s OSOTF program, provide this scholarship in memory of their parents. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
<td>1 award of $2,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Erin Demers Memorial Scholarship [10406]
The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.), along with one supporting reference letter from a Residence Assistant, Residence Manager, or Residence Officer.

Donor(s): Family and friends of Erin Katrina Demers
Qualification(s): Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

Amount: 1 award of $1,800

Euclid-Hitachi Scholarships [14517]
Established by Euclid-Hitachi of Canada Ltd., with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD

Donor(s): Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,500

Graham Family Incentive Scholarship [14506]
Provided by Harvey Graham (O.A.C. ’39) with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD

Donor(s): Harvey Graham O.A.C. ’39 with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students entering the fourth year of a four year degree program, maintaining at least a 70% program average and demonstrating financial need, who have previously received the Harvey Graham Bursary. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $6,000

Guelph Campus Co-operative Centennial Scholarship [10867]
In recognition of the Guelph Campus Co-operative’s centennial anniversary and the students who founded it, this scholarship is awarded to a student who has demonstrated financial need. Preference will be given to students who are members of the Guelph Campus Co-operative. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form and a photocopy of your valid co-operative membership card.

Donor(s): Guelph Campus Co-operative
Qualification(s): Students registered in any program at the University of Guelph who have completed a minimum of 5.0 credits with a minimum cumulative average of 75% and have demonstrated financial need.

Amount: 1 award of $1,000

Jay Majithia Scholarship [14518]
Provided to honour Professor Jay Majithia, in recognition of his support and leadership while a faculty member in the Department of Computing and Information Science, by Margaret Middleton, C.E.P.S., with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7 and attach a letter stating research interest and/or involvement. ACCESS AWARD

Donor(s): Mrs. Margaret L. Middleton with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Computer and Information Science students with demonstrated financial need who have a minimum cumulative program average of 70%. Preference will be given to eligible students who are applying for, or participating in, departmental research, including a special project or an independent study option. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,000

Residence Life Staff Scholarship [10697]
Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students who apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date.

Donor(s): Student Housing Services
Qualification(s): Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program.

Amount: 2 awards of $500

Returning Student Residence Scholarship [10696]
Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students who apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must have resided in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award.

Donor(s): Student Housing Services
Qualification(s): Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average.

Amount: 3 awards of $500

Tara Lynn Giuliani Memorial Scholarship [10375]
Funded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form. Selection is based on financial need.

Donor(s): Tara Lynn Giuliani Foundation at the Hamilton Community Foundation
Qualification(s): Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services and who have demonstrated financial need. Preference given to students with a visual impairment.

Amount: 1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000

William & Nona Heaslip Scholarship [10589]
Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7. Recipients of this award can have this award renewed for up to 3 years provided they continue to demonstrate financial need and maintain a minimum 70% cumulative average of full-time (minimum 80% of a full course load) study. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): The William and Nona Heaslip Foundation
Qualification(s): Students that have completed 4.0 credits but no more than 6.0 credits in any degree program; are a Canadian citizen/permanent resident; have a minimum 70% cumulative average; and demonstrate financial need.

Amount: 2 awards of $15,000

In-course Bursaries
Acer Saccharum Bursary [13083]
Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and confirmation of registration with Student Accessibility Services.

Donor(s): Steven Ardon and Celine Batterink
Qualification(s): Students registered in any degree program at the University of Guelph, who have demonstrated financial need and are registered with Student Accessibility Services.

Amount: 1 award of $1,000

Last Revision: July 4, 2019
<table>
<thead>
<tr>
<th><strong>Brinson Partners Inc. Bursaries [I3526]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brinson Partners Inc., with the assistance of the Ontario government's OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Brinson Partners Inc. with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 2 awards of $1,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Burnbrae Farms Bursaries [I3525]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by Burnbrae Farms, with the assistance of the Ontario government's OSOTF program to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement explaining interests in poultry science to Student Financial Services by October 7. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 2 awards of $1,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Campbell-Ouellette Family Bursary [I3098]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family's broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Dr. Malcolm Campbell</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any program with demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $2,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Class of '72: 25th Reunion Bursaries [I3512]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the Class of '72: 25th Reunion Fund with the assistance of the Ontario government's OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Class of '72: 25th Reunion with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 3 awards of $1,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>David Havoic Bursary [I3087]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the Havoic family, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to the student with the greatest financial need. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and attach a letter from Student Accessibility Services confirming registration and physical disability.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Debbie and David Havoic</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $1,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>David R. Leach Memorial Bursary [I3534]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided in memory of David R. Leach by his family, with the assistance of the Ontario government's OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. 73 and graduated with a B.Sc. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7. ACCESS AWARD</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Mrs Deborah Leach-Sartor with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students who are physically disabled as determined by the Student Accessibility Services with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $1,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Denis and Patricia Yates Bursary [I3097]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by Charlotte Yates in memory of her parents who were strong advocates for the value of education in society. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Dr. Malcolm Campbell</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any program with demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $2,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Elizabeth Burton Bursaries [I3503]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Elizabeth Burton, with the assistance of the Ontario government's OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several awards of varying amounts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Gryphon Investment Council Bursaries [I3513]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 2 awards of $1,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Guelph Compassionate Health and Dental Bursary [I3061]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph’s mandatory Student Health Plan, University of Guelph’s Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment form; (2) a letter from physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and it’s impact on the student's studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) Insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Student Health and Dental Plan Reserve</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student’s academic progress.</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several awards of various amounts to a maximum of $1,500</td>
</tr>
</tbody>
</table>
### Guelph Student Assistance ACCESS Bursaries [13556]

These bursaries have been established and approved by undergraduate students through student referendum with the aid of the Ontario government’s OTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. **ACCESS AWARD.**

| Donor(s): | Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund |
| Qualification(s): | Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards). |
| Amount: | Several awards of varying amounts up to $1,000 |

### Guelph Student Assistance Program [13056]

These bursaries have been established and approved by undergraduate students through student referendum to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. **ACCESS AWARD.**

| Donor(s): | Undergraduate Students |
| Qualification(s): | Full-time undergraduate students registered in any degree program with demonstrated financial need. |
| Amount: | Several awards of varying amounts up to $1,000 |

### Helen Mahon Memorial Bursary [13063]

Established in memory of Helen Mahon, a longtime employee of the University of Guelph and who, following the death of her husband, raised three young children alone, all of whom graduated from university. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a statement that indicates you meet the criteria of this bursary. Awarded in the winter.

| Donor(s): | Family and Friends of Helen Mahon |
| Qualification(s): | Students registered in any program who come from a family where one parent is deceased. |
| Amount: | 1 award of $500 |

### Howard and Myrtle Rogers Bursaries [13537]

Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. **ACCESS AWARD.**

| Donor(s): | The Estate of Howard and Myrtle Rogers with matching funding through the Ontario Student Opportunities Trust Fund |
| Qualification(s): | Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate on-going financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). |
| Amount: | 10 up to $2,000 |

### Indigenous Student Bursary [13068]

In 2009, the Ministry of Advanced Education and Skills Development established the this Bursary as part of their new Aboriginal post-secondary education funding initiative. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with financing their education. Apply to Student Financial Services by October 7th with a Financial Need Assessment Form and complete the Indigenous Student Bursary application. Selection is based on financial need.

| Donor(s): | Ministry of Advanced Education and Skills Development (MAESD) |
| Qualification(s): | Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP) and have demonstrated financial need. |
| Amount: | several awards ranging in values from $1,000 to $3,500 |

### International Emergency Medical Aid Assistance [13059]

The University of Guelph provides support to International undergraduate students that are faced with unexpected, unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an on-going basis.

| Donor(s): | University of Guelph |
| Qualification(s): | International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need. |
| Amount: | Several awards of varying amounts |

### Irvine and Grace Black Memorial Bursary [13051]

Established in memory of Irvine and Grace Black, by friends and family to recognize their many contributions to young people. Irvine, a well-known sheep breeder, was a judge at College Royal and the Royal Winter Fair for over fifty years, and Grace was active in the Women’s Institute and the Fergus Fall Fair. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining involvement in the 4-H Club and/or a Women's Institute by October 7.

| Donor(s): | Family and friends of Irvine and Grace Black |
| Qualification(s): | Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to applicants who are, or have been, active in the 4-H Club and/or a Women's Institute. |
| Amount: | 1 award of $500 |

### Ivey Cook Bursaries [13076]

Apply to SAS using the “New Student Intake Form” and a letter explaining your situation and attach documentation showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first come first served basis, based on the validity and need for an assessment.

| Donor(s): | Suzanne Ivey Cook |
| Qualification(s): | Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment. |
| Amount: | several awards of up to $1,000 |

### John & Margaret Van Loon Family Bursary in Science [13549]

Established on behalf of the Van Loon Family in honour of parents John & Margaret Van Loon. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. **ACCESS AWARD.**

| Donor(s): | Mr. Paul Van Loon and Mrs. Lauralene Van Loon |
| Qualification(s): | Students registered in any program in the College of Biological Science or the College of Physical & Engineering Science who have completed a minimum of 2.5 credits. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards). |
| Amount: | 1 award of $1,500 |

### Madison Gough Memorial Bursary [13103]

Established by the friends and family of Madison Gough, a gentle, kind spirit who was inspired by nature, animals, or music and passionate about acceptance of difference. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. **ACCESS AWARD.**

| Donor(s): | Bob Gough and Laura Ladouceur |
| Qualification(s): | Students registered in any program who have demonstrated financial need. |
| Amount: | 1 award of $1,000 |

### Mary I. Whitelock Bursaries [13524]

Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. **ACCESS AWARD.**

| Donor(s): | Estate of Mary I. Whitelock with matching funding through the Ontario Student Opportunities Trust Fund |
| Qualification(s): | Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). |
| Amount: | 13 awards of $2,000 |
### IX. Scholarships and Other Awards, Bachelor of Computing

#### Métis Nation of Ontario Bursary [I3092]

The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed In-course Financial Need Assessment Form and a statement confirming Métis status and include your card number.

**Donor(s):** Métis Nation of Ontario  
**Qualification(s):** Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk in an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.

**Amount:** 1 award of $1,000

#### Norma Valeriote International Student Bursaries [I3009]

Preference given to a student from a country of focus as defined by CIDA (Canadian International Development Agency). Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.

**Donor(s):** Mrs. Norma L. Valeriote  
**Qualification(s):** International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.

**Amount:** Several of varying amounts

#### Ontario Co-operatives R.P. Forshaw Bursary [I3013]

The Co-operatives, Credit Unions, friends and associates of Prof. R. P. Forshaw have established this bursary. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F) by October 7 and a letter indicating membership of co-op or credit unions.

**Donor(s):** The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw  
**Qualification(s):** Undergraduate students who have financial need. Preference may be given to candidates who have been or are members of a co-operative or credit union.

**Amount:** 1 award of $400

#### Ontario First Generation Bursary [I3062]

The Ministry of Advanced Education & Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.

**Donor(s):** Ministry of Advanced Education & Skills Development (MAESD)  
**Qualification(s):** Students registered in any program who are first generation students, Ontario residents (as defined by OSAP) and who have demonstrated financial need.

**Amount:** several awards ranging in values from $1,000 to $3,500

#### Robert Auger Humanitarian Bursary [I3058]

Established in memory of Bob Auger, a former Associate Registrar at the University of Guelph. It is intended as an emergency fund to assist students who unexpectedly find themselves in difficult financial situation who could benefit from receiving a grocery voucher. To be considered, students must have completed a Financial Aid Assessment form and arrange an appointment with a Financial Aid Counsellor. Appointments can be made by calling 519-824-4120 extension 58715.

**Donor(s):** Family and friends of Robert Auger  
**Qualification(s):** Students registered in any degree program with an unexpected financial emergency.

**Amount:** Several grocery vouchers or book vouchers

#### Ron Scriver Memorial Bursary [I3547]

Established in memory of Mr. Ron Scriver (1946 - 2005) C.E.P.S R.A. '76, to honour his outstanding 32-year career with the Ontario Universities’ Application Centre and his extensive involvement with colleagues throughout the University system. Preference will be given to students registered in the Bachelor of Computing Science Program. Apply with a Financial Need Assessment Form to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Family and Friends of Ron Scriver with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students registered in any program offered by C.E.P.S with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $2,000

#### Scotiabank Bursaries [I3532]

Established by Scotiabank, with the assistance of the Ontario government's OSOTF program, to assist students with financial need to continue their studies as full-time students. Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Scotiabank with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

#### Shirley Endean Bursaries [I3570]

These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Estate of Shirley E. Endean & multiple donors with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

#### Student Financial Services Bursary [I3107]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards up to a maximum of $6,000

#### Uffelmann Connor Family Bursary for Indigenous Students [I3109]

Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Métis or Inuit).

**Donor(s):** Maris Uffelmann and Dean Connor  
**Qualification(s):** Students registered in any program who self-identify with First Nations (Status and non-Status), Métis or Inuit ancestry and who demonstrates financial need.

**Amount:** 1 award of $1,000

#### Uffelmann Connor Family First Generation Bursary [I3108]

Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as a first-generation student.

**Donor(s):** Maris Uffelmann and Dean Connor  
**Qualification(s):** Students registered in any program who is a first-generation student (First generation students (parents did not attend post-secondary studies, full-time or part-time, in or outside Canada at any time or in any program) registered in any program with demonstrated financial need. and who demonstrates financial need.

**Amount:** 1 award of $1,000

#### University of Guelph Access Bursaries [I3522]

Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Alumni and Friend of the University of Guelph with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of $500, Several awards of $2,000
### University of Guelph Alumni Association Access Bursaries [I3523]
Established by the University of Guelph Alumni Association, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD.**

**Donor(s):** University of Guelph Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,250

### University of Guelph International Bursary [I3048]
The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Students should apply to the International Student Advisor by Nov. 1 for the fall semester; March 1 for the winter semester, and July 2 for the summer semester with a completed International Student Financial Need Assessment Form (N.A.F.). If students have an emergency situation, please contact the International Student Advisor, in Student Life, University Centre, Level 3.

**Donor(s):** University of Guelph

**Qualification(s):** International students registered in a degree program who have completed a minimum of 4.0 credits and are registered in a minimum of 1.5 course credits.

**Amount:** Several varies

### University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [I3047]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph

**Qualification(s):** Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards to a maximum of $2,000

### University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph

**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards up to a maximum of $6,000

### University Student Assistance Program [I3057]
These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph

**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).

**Amount:** Several awards of various amounts to a maximum of $1,000
Bachelor of Engineering

Please refer to the General Statement on Awards for:
- Award Eligibility
- ACCESS Awards Eligibility
- Ontario Student Opportunity Trust Fund (OSOTF) Program
- How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

Entrance Scholarships

Angelo and Frank Agro Undergraduate Scholarship [E0520]

These scholarships are provided by the Agro Scholarship Fund. Apply, by April 15, to Student Financial Services (awards@uoguelph.ca), with a one to two-page, point-form listing of 4-H activities. This list should describe current or past activities within 4H and the position titles/names, if applicable. Attach a reference letter from a 4-H club official. These scholarships will be awarded to the students demonstrating the most active involvement with 4H clubs. The committee will consider any appropriate elements, such as the length of membership in 4H, leadership role(s) in support of 4H, creativity in 4H outreach, and coordination with other rural and academic activities. Credit will be given to those who have achieved in county, provincial and national 4H competitions. Recipients must maintain full-time studies and at least a 70% program average each year for continuation of the award.

Donor(s): The Frank Agro Estate
Qualification(s): Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 - 4H projects.
Amount: 7 awards of $7,000 (payable over 4 years of study)

Association of Professional Engineers of Ontario Scholarship [E0016]

These scholarships are provided to one male and one female student entering the Bachelor of Science in Engineering program in recognition of their academic excellence. Application is not required.

Donor(s): Professional Engineers of Ontario.
Qualification(s): Ontario residents entering the B.ENG. with the highest admission average.
Amount: 2 awards of $1,500

Board of Governors’ Scholarships [E0317]

This scholarship is considered one of the University of Guelph’s most prestigious entrance scholarships with only 25 awards being awarded each year. Recipients of this scholarship are entering their program with one of the highest admission averages of that cohort. The scholarship will be renewed each year provided recipients remain registered in full-time studies and achieve a minimum 80.0% average in their previous academic year of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80.0% or better average in the previous academic year of full time study. Payments lost cannot be added to the end of the award period. This award cannot be held with the President’s, Lincoln Alexander Chancellor’s or Chancellor’s Scholarships. Application is not required.

Donor(s): Board of Governors
Qualification(s): Academically outstanding entering students with the highest admission averages of the entering cohort.
Amount: 25 awards of $20,000 (payable over 4 years of study)

Chancellor’s Scholarships [E0688]

This scholarship was established in 2009 in honour of current and past University of Guelph Chancellor and is considered one of the most prestigious entrance awards offered by the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the President’s Scholarships, the Lincoln Alexander Chancellor’s Scholarships, or the Board of Governors’ Scholarships.

Donor(s): University of Guelph
Qualification(s): Students entering a degree program with a minimum 90% admission average who have taken leadership roles in activities that demonstrate an interest in international relations and development, or leadership roles in activities relating to arts and culture and demonstrate the potential to become a leader in society.
Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

December 6th Memorial Scholarship [E0005]

This scholarship, established by the Faculty Association, is awarded in memory of the fourteen women murdered in December 1989 at Ecole Polytechnique and is intended to attract women to a profession that is largely comprised of men. The recipient will be selected on the basis of academic performance. For continued eligibility beyond semester 1, the student must maintain a minimum of 70% cumulative average and full-time studies. Application is not required.

Donor(s): University of Guelph Faculty Association
Qualification(s): Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Engineering and Physical Sciences.
Amount: 1 award of $2,250 ($750 in each of semesters 1, 3 and 5).

Earl B. MacNaughton Entrance Scholarships [E0172]

Established by friends, faculty, staff, alumni and students of the University to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Emphasis during selection will be given to academic achievement in high school science and mathematics. Application is not required.

Donor(s): Earl B. MacNaughton
Qualification(s): Students with high academic standing, entering an honours program in the College of Engineering and Physical Sciences.
Amount: 4 awards of $2,000

Ed Carter/University of Guelph Faculty Association Scholarship [E0292]

Award is payable at $750 per annum in the student’s 1st, 3rd, and 5th semester levels, provided a cumulative average of at least a 70% is maintained. To receive the final payment, the recipient would normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.

Donor(s): University of Guelph Faculty Association
Qualification(s): Students entering any undergraduate degree program at the University of Guelph from Wellington county.
Amount: 1 award of $2,250 ($750 in the 1st, 3rd, and 5th semesters)

Ernie Kendall Science Entrance Scholarship [E0668]

Established by Ernest Kendall, O.A.C. B.S.A. 1932 and awarded to the student entering a science program with the highest admission average. Preference will be given to students that graduated from Elmira District School. This award is not tenable with the President’s Scholarships, the Lincoln Alexander Chancellor’s Scholarships or the Board of Governors’ Scholarships. Application is not required.

Donor(s): Ernest W. Kendall
Qualification(s): Students entering any sciences (B.Sc., B.Sc.(Agr.), B.Sc.(Env.), B.Sc.(Tech), B.A.Sc., B.A.S., B.B.R.M., B.Eng.) degree program with a minimum 80.0% admission average.
Amount: 1 award of $2,000

GFTC Legacy Fund Experience Scholarships [E0918]

In recognition of the Guelph Food Technology Centre’s (GFTC) long association with University of Guelph the GFTC Board has created these scholarships. These scholarships recognize academic excellence and encourage students to study and pursue careers in the food sector. Selection is based on academic achievement, quality of past work experience and relevant future career goals. This scholarship is not tenable with the GFTC Legacy Fund Undergraduate Entrance Scholarships. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) by submitting a one page letter outlining past work experience and a one page letter outlining commitment to future career goals in the food sector. In order to maintain eligibility, recipients must remain registered in one of the specified programs.

Donor(s): The Guelph Food Technology Centre (GFTC)
Amount: 4 awards of $11,500 (payable over 4 years of study)
GFTC Legacy Fund UG Entrance Scholarship [E08899]
In recognition of the Guelph Food Technology Centre’s (GFTC) long association with University of Guelph the GFTC Board has created the GFTC Legacy Fund Undergraduate Entrance Scholarships. These scholarships recognize academic excellence and encourage students to study and pursue careers in the food sector. Selection is based on highest admission average. No application required. Not tenable with the Board of Governors’ Scholarship, Chancellor’s Scholarship, Devine Family Scholarship, Lincoln Alexander Chancellor’s Scholarship and President’s Scholarships. If there are insufficient eligible candidates in any one of the academic programs noted above, in any given academic year, the scholarship(s) will be redistributed to eligible candidates from any other of the identified academic programs. Preference will be given to eligible candidates in the B.Sc. Food Science program. In order to maintain eligibility, students must remain registered in one of the specified programs.

Donor(s): The Guelph Food Technology Centre (GFTC)  
Amount: 17 awards of $14,000 (payable over 4 years of study)

Gordon W. Innes Scholarship [E0140]
Application is not required.

Donor(s): Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.  
Qualification(s): Student entering any degree program from Oxford County with the highest admission average.  
Amount: 1 award of $1,000

Hardy International Student Scholarship [E0659]
Selection is based on the assessment of the student’s admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.

Donor(s): Mrs. Marion Hardy  
Qualification(s): Full-time international students (defined as paying the international student tuition and fees) entering any degree program.  
Amount: 1 award of $2,000

International Student Entrance Scholarships [E0408]
In support of the University’s strategic direction of internationalism, entrance scholarships are available each Fall semester to the top international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all relevant documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.

Donor(s): University of Guelph  
Qualification(s): Students on a “student visa” entering an undergraduate degree program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.  
Amount: Several awards ranging in value from $5,500 - $8,500

J.D. MacLachlan Scholarship [E0170]
Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.

Donor(s): The J.D. MacLachlan Trust  
Qualification(s): Students entering any degree program at the University of Guelph.  
Amount: 1 award of $1,500

Jack and Lillian MacDonald Scholarship [E0379]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

Donor(s): Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald  
Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).  
Amount: 1 award of $900

Linamar Engineering Entrance Scholarships [E0783]
Five scholarships will be awarded to entering students and five scholarships will be awarded to College transfer students. In lieu of insufficient qualified applicants in one category (i.e. high school vs. college transfer) the unwarded scholarships may be applied to the other eligible pool of students for a total of ten scholarships to be awarded each year. The scholarships will be awarded to students with the highest admission averages. Preference will be to award a minimum of two scholarships to Linamar Employees, or to the spouse, children, or grandchildren of Linamar Employees. No application is required, unless an employee or a relative (as defined above) of a Linamar employee, in which case a letter must be submitted to Student Awards Manager (awards@uoguelph.ca) in Student Financial Services by April 15th from Linamar Human Resources confirming the employment status or the relationship to the Linamar employee. This scholarship can only be held once.

Donor(s): Linamar Corporation  
Qualification(s): Students entering any major of the Bachelor of Engineering program or college students transferring into any major of the Bachelor of Engineering program.  
Amount: 10 awards of $2,500

Lincoln Alexander Chancellor’s Scholarships [E0689]
Established in 2001 in honour of Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This award cannot be held with the President’s Scholarships, the Chancellor’s Scholarships or the Board of Governors’ Scholarships.

Donor(s): Many Donors  
Qualification(s): Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.  
Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

McArthur-Humphries Scholarship [E0183]
An equal number of awards are available to students from each county. In the case of insufficient eligible applicants from one county, the awards will be given to eligible applicants from the other county. These scholarships are awarded to students with the highest admission averages. Application is not required.

Donor(s): Wilhelmina McArthur-Humphries Trust Fund  
Qualification(s): Students entering any degree program with a minimum 75% admission average from Lanark and Wellington Counties.  
Amount: 8 awards of $1,000

Phyllis Mary Carpenter Scholarship [E0503]
Awarded to the student with the highest entering admission average. Application is not required.

Donor(s): The Carpenter Family Fund, administered by the Hamilton Community Foundation  
Qualification(s): Full-time student entering the Environmental Engineering program from a publicly funded Ontario secondary school. Preference will be given to students from the Hamilton or Burlington area.  
Amount: 1 award of $2,500
President’s Scholarship [E0238]

Established in 1987 in honour of their donors or distinguished members of the University and are considered one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the Chancellors’ Scholarships, the Lincoln Alexander Chancellor’s Scholarships or the Board of Governors’ Scholarships.

**Donor(s):**

A number of President’s Scholarships have been named in honour of the following people and/or donors:

- Cecil H. Franklin and Ingrid Franklin
- Charles S. Humphrey
- Burton C. Matthews
- Kathleen and Frederick Metcalf
- Lillian Stewart Usher
- Mr. and Mrs. F.T. Metcalf
- Donor(s): University of Guelph
- Qualification(s): Canadian citizens/permanent residents entering or registered full-time in any degree program as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students entering any degree program in the College of Arts.
- Amount: Several awards of $2,000, Several awards of $3,000

President’s Scholarship named in honour of the Students entering any degree program in the College of Arts.

**Donor(s):**

- Prof. Rosalina Morris
- Mr. Edward (Ted) Morwick
- The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.
- **Donor(s):**
- **Qualification(s):**
- **Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

Ted Morwick Scholarship [E0796]

Established by Ted Morwick, honorary alumni. The student with the highest admission average will be selected. This award is conditional on maintaining a 80% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify, (i.e. The student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year.) If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with the Chancellors’, President’s or Board of Governors’ Scholarships. No application is necessary.

- **Donor(s):**
- **Qualification(s):**
- **Amount:** 4 award of $8,000 (payable over four years.)

University of Guelph Entrance Scholarships [E0291]

The value of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student’s financial account in two equal payments in the fall and winter semesters. Application is not required.

- **Donor(s):**
- **Qualification(s):**
- **Amount:** Several awards of $2,000, Several awards of $3,000

W. Penri Morris Memorial Scholarship [E0430]

Established by the family in memory of Penri Morris, who was killed World War II action in 1944 at the age of 21. Penri grew up on the family fruit farm near Forest, Ontario. After graduating from high school, he joined the Royal Canadian Air Force and was attached to the Royal Air Force Bomber Command as a navigator at the time of this death. Awarded to the student with the highest cumulative academic performance above 75% in all courses of the last year in high school study (full-time or equivalent study). Application is not required.

- **Donor(s):**
- **Qualification(s):**
- **Amount:** 1 award of $1,000
Walter and Halina Slabikowski Scholarship [E0766]

This scholarship was established in memory of Walter and Halina Slabikowski who sent their first generation Canadian born children to university to enrich their lives and provide them with greater opportunities. The award will be given to the student with the highest admission average. The residence deposit must be received by published deadline date. Submit by email to awards@uoguelph.ca your full name, student ID number and a statement attesting to your parents’ place of birth and non participation in post secondary education by April 15th.

Donor(s): Irene Thompson and Slabikowski Family
Qualification(s): Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary studies.
Amount: 1 award of $1,000

Waterloo-Wellington Science & Engineering Fair (WWSEF) Scholarship [E0619]

Established to recognize excellence of the project submissions and encourage students to pursue university studies at the University of Guelph.

Donor(s): University of Guelph
Qualification(s): Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.
Amount: various awards of $1,000

Entrance Scholarships with Financial Need

Bill Klopp Memorial Scholarship [E0150]

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by April 15. Students should complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

Donor(s): Ross and Mary Lou Klopp
Qualification(s): Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.
Amount: 1 award of $500

Devine Family Scholarships [E4542]

Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of Governors member, with the assistance of the Ontario government's OSOTF program. These scholarships will be given out once every four years, unless the incumbent fails to qualify. The scholarship is renewed in years two, three and four with continued demonstrated financial need and full-time registration; students are required to register for no less than 2.0 credits each semester. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the "Devine Family Scholarship Application". Deadline to submit the complete application (both parts, the E.N.A.F. and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenable with the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) by April 15. ACCESS AWARD.

Donor(s): The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Entering students who have applied for the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $9,600 (payable in 8 payments of $1,200)

Interhall Council Entrance Scholarship [E0636]

Established by the Interhall Council, the residence student government that programs, advocates and represents residence students to administration and Student Housing Services (www.interhall.ca), to ensure that the residence experience remains accessible to students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15.

Donor(s): Interhall Council
Qualification(s): Students entering a full-time undergraduate degree program with a minimum 85.0% admission average, residing in residence during first year on the Guelph campus with demonstrated financial need and demonstrated strong leadership ability.
Amount: 5 awards of $1,000

Jacob (Jack) Pos Scholarship in Engineering [E1059]

Established via generous donations from The Pos Family, this award honours Professor Jacob (Jack) Pos, a faculty member in the School of Engineering in OAC from 1949 to 1986. Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F) to Student Financial Services by April 15. Selection will be based on greatest financial need.

Donor(s): Jacob (Jack) Pos & Family
Qualification(s): Students entering a Bachelor of Engineering program (in Biological, Biomedical, Water Resources, or Environmental Engineering) with a minimum 80% average and demonstrated financial need.
Amount: 1 award of $1,000

Kenneth O. Hammill-Blount Canada Scholarship [E4356]

Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government's OSOTF program. Selection will be based on greatest financial need from the President’s, Lincoln Alexander Chancellor's or Chancellors' Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President’s, Lincoln Alexander Chancellor's or Chancellors' Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) by April 15. ACCESS AWARD.

Donor(s): The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Entering students who have applied for the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $9,600 (payable in 8 payments of $1,200)

L. Norman Gibbins Microbiology Scholarship [E4392]

Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government's OTSS program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD.

Donor(s): Family, friends and colleagues of Norman Gibbins with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students entering the Microbiology major in the B.Sc. program with a minimum 80% admission average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $2,500
Monteith Family Scholarship in Water Resources & Environmental Engineering [E0934]
Established by the Monteith Family, this award encourages students to pursue a career in Water Resource Engineering or Environmental Engineering, and aims to alleviate the financial load. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admission has been submitted by the student) and submit a one-page, point-form summary highlighting extracurricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15th. To have this scholarship renewed each year, students must maintain a minimum of 70% in their first academic year of full-time study (minimum 2.0 credits) and at least a 75% average of full-time study (minimum 2.0 credits) in subsequent years, and continue to demonstrate financial need each year. Students will not receive payment while on a co-op term, and will resume pending student meets criteria set out for renewal upon their return to full-time studies at the University. A new recipient will be selected once every four years.

Donor(s): Marcia D. Monteith and Eric Monteith
Qualification(s): Students entering the Environmental Engineering major or Water Resources Engineering major of the Bachelor of Engineering program who have a minimum 75% admission average, demonstrated financial need and demonstrated strong leadership ability.
Amount: 1 award of $40,000 (payable over 4 years of study)

P.A.J. Clarke Family Scholarship [E0381]
Paul and Aileen Clarke and their family established the endowment for this scholarship in honour of Paul's father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining extracurricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not a requirement. This award is not tenable with the President's Scholarships or Lincoln Alexander Chancellor's Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

Donor(s): Paul and Aileen Clarke
Qualification(s): Students with a minimum 80% average with a record of leadership and community participation. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm.
Amount: 1 award of $12,000 (payable over 4 years)

Rol-Land Farms Scholarships [E4519]
Established by Rol-Land Farms, with the assistance of the Ontario government's OSOTF program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

Donor(s): Rol-Land Farms with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students entering a degree program with demonstrated financial need and a minimum 80% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 13 awards of $2,000

Entrance Bursaries

Elizabeth Maud Hunter (Shier) Bursary [E3575]
This award was created to assist first year students in obtaining a post secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing a similar situation. Preference given to a student from the County of Brock. Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F.) for Entrance Awards. ACCESS AWARD

Donor(s): The Estate of the Late William Henry "Harry" Hunter with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students entering any degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 3 awards of up to $4,500

First Year Student Residence Bursary [E3066]
These 5 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the on-line Financial Need Assessment Form for Entrance Awards by April 15.

Donor(s): Student Housing Services
Qualification(s): Students entering any degree program with demonstrated financial need.
Amount: 5 awards of $500

Harvey Graham Bursary [E3030]
Provided by Harvey Graham (O.A.C. ’39), Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a working farm and complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

Donor(s): Harvey Graham, O.A.C. ’39
Qualification(s): Students entering any degree program who come from a working farm and who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.
Amount: 1 award of $1,500

International Student Entrance Bursaries [E3043]
In support of the University’s strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students entering an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar’s Entrance Award Application to Student Financial Services.

Donor(s): University of Guelph
Qualification(s): Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.
Amount: Several awards ranging in value from $1,000 to $3,000

Registrar’s Entrance Bursaries [E3058]
Established by the University of Guelph to support entering undergraduate students with identified financial need. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Bursary, but can be held with all other entrance awards.

Donor(s): University of Guelph
Qualification(s): Students entering any degree program with a minimum registration of 1.5 credits and demonstrated financial need.
Amount: 500 awards of $4,000

Robert Arthur Stewart Bursaries [E3272]
Established in memory of Mrs. Elza H. Stewart of Pakenham, Ontario. Mr. Stewart graduated from the Ontario Agricultural College in 1933 and Mrs. Stewart from Macdonald Institute in 1932. Applicants for these bursaries should have a good academic record and an active interest in community affairs. A letter from the student and a recommendation from the County agricultural representative or the secondary school principal should be sent to Student Financial Services by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

Donor(s): The Estate of Mrs. H. Stewart
Qualification(s): Students from the Ontario Counties of Lanark and Renfrew, and the Regional Municipality of Ottawa-Carleton, entering the 1st semester of a degree program at the University of Guelph.
Amount: 14 awards of $1,000
Steven Jones Memorial Bursaries [E3077]

Established by Mr. and Mrs. Jones in memory of their late son, Steven Jones (B.Comm. '97). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. Selection will be made on demonstrated financial need.

Donor(s): Mr. and Mrs. Jones

Qualification(s): Students entering any degree program with demonstrated financial need.

Amount: several awards of $2,000

University of Guelph Accessibility Bursaries [E3038]

Established by the University of Guelph to support students with substantial demonstrated financial need. In addition, students will be automatically approved for to participate in the work-study program conditional on the student securing a work-study approved position on campus. Participating in the work-study program is not required to hold this bursary. Payments of this award and the eligibility to participate in the work-study program are conditional upon the recipient receiving funding through their provincial/territorial and/or federal student loan assistance program and registration in a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F.Scholarship offers will be made in May. This award is not tenable with the Registrar’s Entrance Bursary, but can be held in conjunction with other Entrance Awards.

Donor(s): University of Guelph

Qualification(s): Students entering any degree program with demonstrated financial need and a minimum registration of 1.5 credits.

Amount: 200 awards of $14,000 (payable over 4 years) plus Work-study approval

Veriphy Skincare Scholarship for Women in STEM [E1092]

Supporting women and the pursuit of education in STEM are intrinsic values for the Veriphy founders. To support this commitment this scholarship has been established through the University of Guelph, where PhytoSpherix™ was discovered. Apply by completing the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. Selection will be based on greatest financial need.

Donor(s): Veriphy Skincare Inc.

Qualification(s): Female students entering a program offered by the College of Engineering and Physical Sciences with a minimum 80.0% admission average and demonstrated financial need.

Amount: 1 award of $1,000

In-course Scholarships

Aboriginal Student Engagement Scholarship [I0922]

Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA’s commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status), Métis or Inuit and outline volunteer/leadership experience within the Aboriginal community. The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but not be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

Donor(s): Aboriginal Student Association

Qualification(s): Students registered in any program who self-identify as First Nation (status and non-status), Métis or Inuit, who are engaged in the Aboriginal community either in their home community or at the University of Guelph.

Amount: 1 award of $1,000

Alumni House Call Centre Scholarship [I1020]

Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15th with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

Donor(s): Former Employees of the Alumni House Call Centre

Qualification(s): Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.

Amount: 1 award of $1,000

Amina Kapadia Memorial Scholarship [I1093]

This scholarship was created and funded by the Kapadia Family and Department of Chemistry, in the memory of Ms. Amina Kapadia who died with her parents in a tragic house fire on February 14, 2017.

Donor(s): The Kapadia Family

Qualification(s): Student registered in the Biological and Pharmaceutical Chemistry major who completed CHEM*1040 in the previous academic year (fall/winter/summer).

Amount: 1 award of $1,000

Association of Professional Engineers Medal [C0019]

Application is not required.

Donor(s): Professional Engineers of Ontario

Qualification(s): Graduate of an accredited engineering program, obtaining the highest average in the practical work and written examinations of the year.

Amount: 1 award of a Gold medal

Association of Professional Engineers of Ontario Scholarships [I0018]

Selection is made on high academic achievement and demonstrated leadership as evidenced through participation in professional development and extra-curricular activities described in a letter of application. Apply, with a letter, to the Chair of the Awards Committee, School of Engineering, by May 15th.

Donor(s): Professional Engineers of Ontario

Qualification(s): Students registered in an Engineers Canada Accreditation Board accredited program within the School of Engineering and who have completed a minimum of 5.25 and a maximum of 18.0 credits

Amount: 4 awards of $1,500

Bill Taylor Memorial Scholarship [I0280]

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.

Donor(s): AMF Canada Ltd.

Qualification(s): Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or intercollegiate athletics.

Amount: 1 award of $900

Brathwaite Business Scholarships [I0827]

Named in honour of Professor Bill Brathwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15th with a resume and 500-word statement describing why business courses, in addition to their major, will benefit their future career. Shortlisted applicants may be invited for an interview with the LANG Awards Committee. Selection is based on the student who best describes why taking business courses, in addition to their major, will benefit their future career. Students may hold this award only once.

Donor(s): Anonymous

Qualification(s): Students registered in any degree program, with the exception of B.Comm., who have successfully completed 1.0 credits towards the Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150 Introduction to Canadian Business or students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) who have completed 1.0 credits towards the minor.

Amount: 10 5000 (payable over 2 semesters)
Bridge Builder Scholarship [I1050]  
The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Apply to Student Financial Services by May 15th with a page outlining the student’s leadership roles, by May 15, with and explaining their contributions to the community’s well-being. Application is not required.  
**Donor(s):** Muslim Society of Guelph  
**Qualification(s):** Students registered in any program who, through leadership roles, have demonstrated a passion and commitment for building bridges in the local community.  
**Amount:** 1 award of $1,000

C. Grace Porterfield Undergraduate Scholarship [I0961]  
C. Grace Porterfield, a graduate of the Macdonald Institute in 1954 and a Professor Emeritus at Althouse College, University of Western Ontario has made a gift to provide this scholarship. Students will apply to the CSAHS Awards Committee by May 15th with a letter outlining how they have demonstrated interest in the promotion of healthy lifestyle and nutrition through their involvement in community work.  
**Donor(s):** C. Grace Porterfield  
**Qualification(s):** Students registered in a BASc Program in the College of Social and Applied Human Sciences who have completed at least 10 credits and no more than 15 credits and who are either Canadian citizens or permanent residents of Canada. Students who have demonstrated interest in the promotion of healthy lifestyle and nutrition through their involvement in community work.  
**Amount:** 1 award of $1,500

CEPS-SC Student Leader Scholarship [I0938]  
Established to recognize the student who demonstrates the most significant contributions to enhancing and promoting the physical and engineering sciences at the University of Guelph, through leadership roles. Students will apply to the CPES Awards Committee by May 15th with a letter outlining their leadership roles and contributions and a reference letter indicating what contributions they made to promoting physical and engineering sciences.  
**Donor(s):** CEPS-SC Student Council  
**Qualification(s):** Students registered in any program offered by the College of Engineering and Physical Sciences who have completed a minimum of 4.0 credits with demonstrated involvement in college-related volunteer/leadership activities.  
**Amount:** 2 awards of $1,000

CFRU Volunteer Scholarship [I0215]  
The award is presented to the student who has made the most significant contribution to the operation and goals of CFRU. Apply to Student Financial Services by May 15th with a letter outlining their volunteer/leadership activities. Students who have demonstrated significant leadership in the promotion of community well-being. Application is not required.  
**Donor(s):** CFRU Alumni  
**Qualification(s):** Students registered in any program with a minimum cumulative average of 70% who have volunteered at CFRU for at least one year.  
**Amount:** 1 award of $1,000

CFUW Guelph – Engineering Scholarship [I0294]  
Established by the Canadian Federation of University Women – Guelph to assist women to obtain higher education. Selection is based on the highest cumulative average. Application is not required.  
**Donor(s):** Canadian Federation of University Women - Guelph  
**Qualification(s):** Female students registered in any Bachelor of Engineering program who have completed more than 10.0 credits.  
**Amount:** 1 award of $1,000

Christina Victoria Kenny Memorial Scholarship [I1018]  
The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.  
**Donor(s):** Family and Friends of Vikki Kenny  
**Qualification(s):** Students registered in any degree program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.  
**Amount:** 1 award of $1,000

Class of 1970 Scholarship [I0424]  
Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The recipients will be announced in May. Application is not required.  
**Donor(s):** Class of 1970: 25th Reunion Gift  
**Qualification(s):** Outstanding student in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Deans’ Honours List.  
**Amount:** 1 award of $1,400

College of Engineering and Physical Sciences Graduation Prize [C0075]  
The winner will be selected in May from all students who have completed their program in the previous twelve months. Application is not required. One award of $1000 and a commemorative plaque.  
**Donor(s):** College of Engineering and Physical Sciences  
**Qualification(s):** Students registered in any program with a minimum 80% average and shows passion in their commitment to any cause specific to the applicant..  
**Amount:** 1 award of $1,000

CSCE Environmental and Water Resources Engineering Scholarships [I0549]  
Established by the School of Engineering in recognition of the conference entitled, An International Perspective on Environmental Engineering, organized and co-sponsored in 2002 by the School and proposed by the Environmental Engineering Division of the Canadian Society for Civil Engineering (CSCE) in co-operation with the Environmental and Water Resources Institute of the American Society of Civil Engineering. Application is not required.  
**Donor(s):** School of Engineering  
**Qualification(s):** Full-time student registered in an honours program offered by the College of Engineering & Physical Sciences.  
**Amount:** 1 award of $1,000, 1 Commemorative plaque

Dalia Fayek Memorial Scholarship in Electrical Devices [I0960]  
Established by the friends and family of Dr. Dalia Fayek. Dr. Fayek was a role model for women in engineering. She believed passionately that more women should become engineers and spent a great deal of her time mentoring young women in her profession. Dr. Fayek’s passion was instinctive to every part of her life, whether it was her family, community or church. Apply by May 15th with a letter of no more than 500 words to the School of Engineering Awards Committee that summarized your passion for a specific and relevant cause you have been involved in and the driving force behind your involvement. If two or more students demonstrate significant passion for a cause they have been involved with, the student with the highest cumulative average will be selected. Application is not required.  
**Donor(s):** The family and friends of Dr. Dalia Fayek  
**Qualification(s):** Students registered in any major offered by the School of Engineering who have completed at least 10.75 credits, including ENGG*3450 with a minimum 80% average and shows passion in their commitment to any cause specific to the applicant..  
**Amount:** 1 award of $1,000

Deans’ Scholarships [I0323]  
This award was established by the Board of Governors’ in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.  
**Donor(s):** Board of Governors  
**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.  
**Amount:** 150 awards of $2,000
<table>
<thead>
<tr>
<th>Scholarships</th>
<th>Amount</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doody Family Scholarship for Women in Engineering [10990]</td>
<td></td>
<td>Female students registered in a full-time degree program in the School of Engineering and have completed between 4.75 and 20.0 course credits with a minimum 70% cumulative average.</td>
<td>Brian &amp; Diana Doody</td>
</tr>
<tr>
<td>Doody Family Scholarship for Women in Engineering [10990]</td>
<td></td>
<td></td>
<td>Mrs. George A. Gray</td>
</tr>
<tr>
<td>Dr. James (Jim) Atkinson Scholarship [11025]</td>
<td></td>
<td></td>
<td>Alumni and Friends of Dr. James (Jim) Atkinson</td>
</tr>
<tr>
<td>Dr. William Winegard Scholarships in Engineering [11143]</td>
<td>2 awards of $1,000</td>
<td>Students who have completed between 5.25 and 8.0 credits and have completed all of the courses required in the schedule of studies in semesters one and two of the Bachelor of Engineering program.</td>
<td>the family of Dr. William (Bill) Vineland</td>
</tr>
<tr>
<td>E.B. MacNaughton Convocation Prize [C0171]</td>
<td>2 awards of $2,500</td>
<td></td>
<td>The College of Engineering and Physical Sciences</td>
</tr>
<tr>
<td>Emmanuel &amp; Kallioph Salamalekis Scholarship [10987]</td>
<td>1 award of $1,000</td>
<td></td>
<td>Dr. Tony Vannelli, Dean of the College of Physical &amp; Engineering Science from 2007 to 2016, and his wife, Voula, established this award in honour of Voula’s parents, Emmanuel &amp; Kallioph Salamalekis. Selection will be based on high cumulative average and demonstrated engagement in the community, preferably in a leadership role supported by two letters of reference from individuals who or organizations that have knowledge of and can attest to that experience. Apply to the College of Physical &amp; Engineering Science Awards Committee with a letter of application and two supporting reference letters from individuals or organizations attesting to community engagement experience by May 15th. This award is not tenable with the Michele &amp; Maria Vannelli Scholarship (10988).</td>
</tr>
<tr>
<td>Engineering Society Scholarship [11079]</td>
<td></td>
<td></td>
<td>Engineering Society</td>
</tr>
<tr>
<td>George A. Gray O.A.C. ’51 Varsity Scholarships [10487]</td>
<td>1 award of $1,000</td>
<td></td>
<td>George A. Gray</td>
</tr>
<tr>
<td>Gordon L. Rimmer Scholarship in Rehabilitation Robotics [10814]</td>
<td>2 awards of $1,250</td>
<td>Students registered in any major in the Bachelor of Engineering program who have completed a minimum 4 ENGG credits (including ENGG 2100) and who are working on or who have completed rehabilitation robotics as part of a design project or co-op project.</td>
<td>Herb &amp; Joanne Shoveller</td>
</tr>
<tr>
<td>Governor General’s Medal [C0044]</td>
<td>1 award of $2,000</td>
<td></td>
<td>The Chancellery</td>
</tr>
<tr>
<td>Helen Grace Tucker Design Prizes [C0365]</td>
<td>2 awards of a Silver medal each</td>
<td></td>
<td>Estate of Helen Grace Tucker, O.A.C.</td>
</tr>
<tr>
<td>International Undergraduate Scholarship [10577]</td>
<td>7 awards of $500</td>
<td></td>
<td>International Student Organization (ISO)</td>
</tr>
<tr>
<td>Last Revision: July 4, 2019</td>
<td></td>
<td></td>
<td>Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.</td>
</tr>
</tbody>
</table>
### Jack and Lillian MacDonald Scholarship [E0379]

Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.  

**Donor(s):** Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald  
**Qualification(s):** Entering students coming from the Six Nations Polytechnic (SNP).  
**Amount:** 1 award of $900

### John Eccles Scholarship [10093]

Apply to Student Financial Services, by May 15, with a letter highlighting leadership abilities through participation on residence life. Providing a reference letter would be an asset.  

**Donor(s):** Student Housing Services  
**Qualification(s):** Full-time student registered in semester 2, 3, 4, 5 or 6 and living in residence in the Winter semester who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in residence related activities. Residence Life Staff and paid members of Interhall Council and Hall Councils are not eligible.  
**Amount:** 1 award of $1,000

### Johnson & Johnson Diversity and Inclusion Scholarship in Science [I1107]

This scholarship is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LBGT peoples. Preference will be given to an applicant who is involved in the LBGT community as demonstrated by a record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a given student only once. Projects must have been completed or research proposals accepted within the past calendar year. Apply to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referencing involvement in the LBGT community and/or faculty support.  

**Donor(s):** Lambda Foundation and other donors  
**Qualification(s):** Students enrolled in a program with a thesis, a research essay, independent research project or course work programs pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.  
**Amount:** 1 award of $1,000

### Lambda Foundation Scholarship in LBGT Studies [I0591]

This is a scholarship established by Professor Gordon L. Lange, Professor Joe M. Prokipcak, friends and colleagues. Professors Gordon L. Lange and Joe M. Prokipcak were valued members of the chemistry Faculty who retired in 2001. Their excellence in teaching was recognized within the university and nationwide, winning them a total of eleven teaching awards. This scholarship will be awarded to the student with the highest average grade in CHEM*1040, 1050 and 2700. Application is not required.  

**Donor(s):** Lambda Foundation and other donors  
**Qualification(s):** Students registered in any program offered by the College of Biological Science or the College of Engineering and Physical Sciences with a minimum cumulative average of 75% who have completed 4.0 credits and who have demonstrated leadership to increase advocacy for diversity and inclusion in the community. Preference will be given to leadership in the Guelph community.  
**Amount:** 1 award of $1,000

### Kenneth W. Hammond Scholarship [10045]

Student with the highest grade in the course ENVS*2070 “Environmental Perspectives and Human Choices.” Application is not required.  

**Donor(s):** Kenneth W. Hammond  
**Qualification(s):** Students who have completed the course Environmental Perspectives and Human Choices ENVS*2070  
**Amount:** 1 award of $1,000

### Kevin Durie Memorial Scholarship [10653]

Established in memory of Kevin Durie, BA ‘93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.  

**Donor(s):** Christine Blake-Durie  
**Qualification(s):** Students who are registered in any degree program on the University of Guelph campus, are a member of Residence Life staff and are academically eligible to continue as a Residence Assistant or as part of Residence Life staff.  
**Amount:** 2 awards of $1,000

### Kip Hunter Prize [I0139]

For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May 1.  

**Donor(s):** Faculty, students and staff of the Philosophy Department  
**Qualification(s):** Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.  
**Amount:** 1 Book prize

### Knut Karl Grimstad Memorial Scholarship [I0116]

Application is not required.  

**Donor(s):** Mrs. Anne Grimstad  
**Qualification(s):** Outstanding students majoring in Water Resources Engineering. Scholarships are based on academic proficiency in semesters 5 and 6, and on participation in extracurricular activities associated especially with the profession of engineering.  
**Amount:** 2 awards of $600

### Lange and Prokipcak Chemistry Scholarship [I0528]

This scholarship was established by Professor Gordon L. Lange, Professor Joe M. Prokipcak, friends and colleagues. Professors Gordon L. Lange and Joe M. Prokipcak were valued members of the chemistry Faculty who retired in 2001. Their excellence in teaching was recognized within the university and nationwide, winning them a total of eleven teaching awards. This scholarship will be awarded to the student with the highest average grade in CHEM*1040, 1050 and 2700. Application is not required.  

**Donor(s):** Professor Gordon L. Lange, Professor Joe M. Prokipcak and friends  
**Qualification(s):** Students registered in any program offered by C.E.P.S who has completed CHEM*1040, CHEM*1050, CHEM*2700 and have completed a minimum of 10.0 credits up to a maximum of 14.75 credits.  
**Amount:** 1 award of $1,000

### Leonard Conolly Exchange Student Scholarship [I0446]

Established by students, faculty, staff and friends to honour Prof. Leonard Conolly, professor of drama, Chair of the Department of Drama, 1981-88, and Associate Vice-President Academic, 1988-1992. Apply to the Centre for International Programs by April 5, for visiting during the subsequent Fall or Winter semesters. Selection, by the Centre for International Programs, will be based on assessment of (a) a one-page submission describing the significance of the student visiting Guelph to the program of study at the partner exchange university (b) two faculty references of one-page each, and (c) consistent high performance in the course work completed, as documented by a transcript of program grades to date, submitted by the home university.  

**Donor(s):** Students, staff, faculty and friends of Dr. Leonard Connolly  
**Qualification(s):** Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).  
**Amount:** 1 award of $1,000
Linda S. Allen Memorial Graduation Prize [C0914]
This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medalion, on the occasion of her second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant circumstances during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).

Donor(s): Brian Allen, Family, Friends and Colleagues of Linda S. Allen
Qualification(s): Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.
Amount: 1 award of $1,000

McNeil Consumer Healthcare Diversity and Inclusion Scholarship in Science [I0947]
Established to acknowledge students who demonstrate leadership by increasing advocacy for diversity and inclusion in the community. Selection will be based on greatest demonstrated leadership to increase advocacy for diversity and inclusion in the community through positions held, extracurricular activities and involvement on campus and in the community as evidenced by two letters of reference. Leadership that increases advocacy for inclusion; creating an environment that is safe, positive, respectful and diverse; recognizes and celebrates the range of social identity groups that comprise the community. Apply by May 15th to the CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) with two letters of reference. Preference will be given to leadership in the Guelph community. Students may hold this award only once.

Donor(s): McNeil Consumer Healthcare
Qualification(s): Students registered in any program offered by the College of Biological Sciences or the College of Engineering and Physical Sciences with a minimum cumulative average of 80% who have completed 4.0 credits and who have demonstrated leadership to increase advocacy for diversity and inclusion in the community.
Amount: 1 award of $4,000

O.A.C. ’55 Scholarships [I0064]
Provided by the class of O.A.C. ’55. Recipients will have made an outstanding contribution to College life through academic proficiency and participation in extracurricular activities and can be considered to have done the most for the College for fellow students and in their personal development. Apply by May 15 to the OAC Dean's Office (Awards) with a letter outlining your participation in College activities. Awarded in the fall semester.

Donor(s): O.A.C. ’55
Qualification(s): Students registered in any O.A.C. degree program or students registered in the B.ENG. program that have completed a minimum of 10.0 with at least a 70% cumulative average.
Amount: 1 award of $1,500

Peter Chisholm Engineering Student Leadership Scholarship [I1068]
Established in memory of Professor Peter S. Chisholm to recognize an engineering student who has demonstrated outstanding leadership skills in the School and/or community. Apply by May 15 to the Engineering Awards Committee with two reference letters describing the individual and a one-page statement outlining extracurricular activities and involvement on campus, in the School of Engineering, and in the community. In addition to the scholarship of $5,000, award recipients will be given a unique opportunity to connect with the class representatives of this award, who will assist in building Professional Engineering connections, provide career mentorship & networking, and assistance with finding summer employment. If there is a tie, the student with the highest cumulative average will be selected.

Qualification(s): Students registered in any major offered by the School of Engineering who have completed a minimum of 10.0 credits, but no more than 16.0, with a minimum 75% average and demonstrated outstanding extra-curricular activity and community involvement. Involvement in engineering-focused clubs or activities will be given preference.
Amount: 1 award of $5,000
### Professional Staff Association Future Leader Scholarship [I1132]
This scholarship is provided to students whose leadership involvement makes a positive impact at the University of Guelph and/or the broader community. Apply by email to awards@uoguelph.ca by May 15 with one letter of reference and a personal statement (max 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average will be awarded. This award may not be held more than once.

**Donor(s):** The Professional Staff Association (PSA)

**Qualification(s):** Students registered in any program who demonstrate involvement in leadership opportunities that result in positive community impact, and who are from the immediate family of full-time, part-time, contractual or retired members of the Professional/Managerial Group at the University of Guelph. Preference will be given to a student that has not received the Professional Staff Association Scholarship in the same year.

**Amount:** 1 award of $1,500

### Professional Staff Association Scholarship [I0628]
This scholarship is provided to students with the highest cumulative average. Apply to Student Financial Services by May 15 by sending an email to awards@uoguelph.ca and include the name of the family member of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. This award may be held more than once, however, not in consecutive years. Preference will be given to students of current or retired P.S.A. members. Selection will be based on highest cumulative average.

**Donor(s):** Professional Staff Association

**Qualification(s):** Full-time students who are from the immediate family, part-time or contractual Professional/Managerial Group employees of the University, and/or retired Professional/Managerial Group of the University of Guelph who have completed at least 5.0 credits and have a minimum 70% cumulative average.

**Amount:** 1 award of $1,500

### Professor Ross W. Irwin Scholarship in Water Resources [I0942]
In memory of Professor Ross W. Irwin, the Land Improvement Contractors of Ontario have made a gift to the University of Guelph to endow and establish the Professor Ross W. Irwin Memorial Scholarship. He researched and taught soil mechanics and land drainage at the University of Guelph for 35 years. His outstanding contributions have been recognized by many professional societies, and he was inducted to the Ontario Agricultural Hall of Fame in 2006. Apply by May 15th with a letter of no more than 500 words to the School of Engineering Awards Committee that summarizes and explains your active involvement in water conservation issues. If two or more students demonstrate significant involvement in water conservation issues, the student with the highest cumulative average will normally be chosen.

**Donor(s):** Land Improvement Contractors of Ontario

**Qualification(s):** Students registered in the Water Resources major of the Bachelor of Engineering Program who have a minimum 75% cumulative average and have demonstrated academic excellence in soil and water conservation course work and are actively involved in water conservation issues.

**Amount:** 1 award of $1,000

### Project Hero Scholarship [I0979]
The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph

**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

### Raymond Theodore Guther Memorial Scholarship in Water Resources [I0989]
In memory of their classmate and friend, the Engineering Class of 1991, along with Ray’s family, established the Raymond Theodore Guther Memorial Scholarship in Water Resources. Ray exhibited a strong commitment to the stewardship and conservation of water, and did a great job of integrating engineering with fisheries management and other ecological disciplines. He brought people together to collaboratively solve problems in a way that highlighted mutual respect. Ray’s generosity, warmth, selflessness and willingness to serve others were highly valued at the Halton Region Conservation Authority where he worked until his death. A true friend to many, Ray will forever be remembered as ‘larger than life’. Selection will be based on demonstrated commitment and active involvement with issues relating to water conservation evident through membership in or volunteer work with water conservation/resources organizations, extra-curricular water conservation/resources projects outside of course work and/or related activities on campus/in school/in the community. Apply to the School of Engineering Undergraduate Awards Committee with a letter of application and one supporting reference letter from an individual who can best attest to involvement in water conservation issues by May 15th.

**Donor(s):** Classmates, Family and Friends of Raymond Theodore Guther

**Qualification(s):** Students registered in the B.Eng. program majoring in Water Resources who have completed a minimum of 11.5 credits and are actively involved with issues relating to water conservation.

**Amount:** 1 award of $2,000

### Resilience Scholarship (CEPS) [I1126]
Apply by January 31st to the School of Engineering Awards Committee with a resume and a 500-word statement describing how the applicant has overcome adversity, demonstrated resiliency, leadership and perseverance, and how their actions have had a positive impact on others. Selection will be based on: 1. Resilience in response to personal life challenges or adversity (e.g. physical disability, financial constraints, socio-economics barriers); 2. Effective leadership, as evidenced through positions held, extracurricular activities, involvement on campus/in school and/or in the community; 3. Positive impact, on others, the School of Engineering, the University of Guelph, or the broader community, as evidenced in a 500-word statement. In the event of a tie the student with the highest cumulative average will be selected. Award cannot be held more than once.

**Donor(s):** The Angel Gabriel Foundation

**Qualification(s):** Female students registered in any program within the School of Engineering, who have assumed roles of leadership and who have demonstrated resilience in response to personal life challenges or adversity (e.g. physical disability, financial constraints, socio-economic barriers).

**Amount:** 1 award of $5,000
RWDI Scholarship for Engineering Student Athletes [11135]

Established by Rowan Williams Davies & Irwin Inc. (RWDI), an engineering consulting firm specializing in the science of buildings and structures. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

Donor(s): RWDI

Qualification(s): Current members of any Gryphon varsity team who are registered in any program offered by the School of Engineering and who have achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student-athlete who has volunteered in the community.

Amount: 1 award of $3,500

School of Engineering Retiree Scholarship of Excellence [10868]

The recipient will be the student with the highest cumulative average. If there is a tie, the student with the highest average in the last academic semester will receive the award. No application required.

Donor(s): School of Engineering Retirees

Qualification(s): Students currently registered in any major of the B.Eng. program who have completed a minimum of 4.0 ENGG credits, including ENGG*2100, and not more than 7.0 ENGG credits.

Amount: 1 award of $2,000

Scotiabank Scholarships in Leadership [10834]

Apply to the Department of Management Awards Committee by May 15 with: 1) A 500 word personal statement describing the impact of their leadership practice in a non-profit setting including the benefits both to the student and to the organization; 2) Reference letter(s) from the organization(s) in which the leadership practice took place. In the event of a tie, the award will go to the student with the highest cumulative average. Please submit your application by email to: dom.awards@uoguelph.ca.

Donor(s): Scotiabank

Qualification(s): Students who have completed the Foundations of Leadership course (HROB*2010) and either completed the required 120 hours of leadership practice for the undergraduate Certificate in Leadership in a non-profit setting or are registered in the Leadership and Organizational Management major of the BComm program and have demonstrated exceptional leadership in a non-profit setting.

Amount: 5 awards of $1,000

Sports Media and Sports Broadcasting Scholarships [11035]

Apply by May 15th to Student Financial Services by submitting a one page letter outlining sports media or sports broadcasting experience in the past year. Letters can be emailed to awards@uoguelph.ca. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minor in Media and Cinema Studies and who have the highest GPA.

Donor(s): Rogers Media Inc.

Qualification(s): Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas. To be awarded to an undergraduate student first, then to a graduate student if no undergraduate students apply.

Amount: 2 awards of $2,500

Stephanie Wilken Volunteer Scholarship [10449]

Established by the Wilken family in memory of Stephanie Wilken, BA 1995. Apply to Student Financial Services with letter indicating the kind and extent of volunteer activities at the Wellness Centre by October 1. Selection committee is the Senate Committee on Awards on the recommendation of the Student Wellness Educator at the Wellness Centre.

Donor(s): Bev and Darlene Wilken

Qualification(s): Student registered in any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre.

Amount: 1 award of $1,000

Summerlee Humanitarian Scholarships [10964]

The Summerlee Humanitarian Scholarships are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues of global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a student who can demonstrate past significant impacts in improving local communities/groups will be considered, preference will be given to applicants with strong previous proven international humanitarian efforts. Recipients must adhere to the University of Guelph’s Safe Travel Policy.

Donor(s): The Angel Gabriel Foundation

Qualification(s): Students registered in any program with no more than 17.0 credits who have demonstrated a commitment to humanitarian efforts including but not limited to those affecting refugees, displaced persons, and populations affected by conflict and natural disasters through volunteer positions, prior employment and/or extra-curricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.

Amount: 5 awards of $10,000 ($5,000 in each of the fall and winter semesters) plus an additional up to $4,000 to support travel costs

Susan Travers Memorial Scholarship [10975]

Established by friends, family and colleagues in Alumni Affairs and Development in Memory of Susan Travers. Susan believed in the value of education. She worked for the University of Guelph as a member of Alumni Affairs and Development and in the Department of Business. She not only encouraged her children to pursue post-secondary education, but led by example, pursuing her university degree as a mature student. Preference will be given to students registered in CSAWS and LANG. Selection will be based on highest cumulative average. No application required.

Donor(s): The staff in Alumni Affairs and Development and Friends

Qualification(s): Students who were accepted to the University of Guelph as a “mature student” applicant and who are currently registered in any degree program.

Amount: 1 award of $1,000

Taggart Scholarship in Biological Engineering [10278]

Apply by letter and a resume to the Chair of the School of Engineering Awards Committee by October 1.

Donor(s): Ontario Agriculture College Fund

Qualification(s): Student who has completed 17.25 credits of the Biological Engineering in the B.Eng. program. Academic standing and demonstration of leadership qualities will be used to select the recipient from eligible candidates.

Amount: 1 award of $600

Thomas H. Peters Scholarship [10233]

Application is not required.

Donor(s): Friends and associates of Thomas H. Peters

Qualification(s): Student in any academic program of the University who has completed courses in Land Reclamation (e.g. CROP*2280, SOIL*3200), with a minimum 10.0 credits completed. Applicants must have a minimum of 70% cumulative average and have demonstrated an interest and aptitude in the area of crops and land reclamation.

Amount: 1 award of $500

Toronto District Beekeeper’s Association Scholarship [10285]

A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application is not required.

Donor(s): Mr. Jack Robinson

Qualification(s): The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.

Amount: 1 award of $500
### IX. Scholarships and Other Awards, Bachelor of Engineering

#### United Steelworkers Local 4120 Scholarship [I0293]

Apply to Student Financial Services by January 31 and provide the name of the USWA member and relationship to the applicant. If there is more than one eligible candidate, the award will go to the one who has attained the highest relative class standing in his or her previous full-time semester.

**Donor(s):** United Steelworkers Lu4120  
**Qualification(s):** Student who is a member or former member, or who is from the immediate family of a member of United Steelworkers Lu 4120, and who is entering semester 2, 3, or 4 of a degree or diploma program in the Winter semester with a minimum 70% cumulative average.  
**Amount:** 1 award of $1,000

#### University of Guelph Alumni Legacy Scholarship [I0735]

Funded through donations made to the University of Guelph Alumni Memorial Fund in memory of deceased alumni. The recipient will be selected based on academic achievement and volunteer contributions to the University of Guelph community. Apply to Student Financial Services by May 15 with a cover letter indicating name, degree and year of graduation of alumna/alumni relative and a resume or summary of leadership and volunteer contributions to the University of Guelph community.

**Donor(s):** Various donors c/o University of Guelph Alumni Association Memorial Fund  
**Qualification(s):** Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with both a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumna/us of the University of Guelph or its founding colleges.  
**Amount:** 1 award of $1,000

#### University of Guelph Retirees Association Scholarship [I0569]

Established in 2007 to acknowledge in-course student achievement. The student having the highest cumulative average will be selected and in the event of a tie, the student with the highest average in the last two semesters of full-time studies will be chosen. Apply by May 15th to Student Financial Services with a letter indicating name of and relationship to a retiree of the University of Guelph. Recipients cannot hold this scholarship and another scholarship greater than $1,500 at the same time.

**Donor(s):** University of Guelph Retirees Association (U.G.R.A.)  
**Qualification(s):** Students with a minimum cumulative average of 75% registered in a degree program who are related to a retiree of the University of Guelph as child, grandchild or great grandchild or child who have not held the scholarship before.  
**Amount:** 1 award of $1,500

#### Van Stralen and Van Der Hoven Memorial Scholarship [I0296]

The scholarship will be awarded to the student who has demonstrated academic achievement and exemplary leadership. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca a one-page summary demonstrating leadership skills gained through participation in extracurricular activities, both within the university and the broader community. Preference will be given to students who have completed between 3 and 10 credits at the time of application for the award.

**Donor(s):** Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoven & family  
**Qualification(s):** Students registered in any program who have achieved a minimum of 80% cumulative average and participated in extra-curricular activities.  
**Amount:** 1 award of $2,000

#### W.C. Winegard Medal [C0311]

The W.C. Winegard Medal is the most prestigious and top convocation award presented to an undergraduate student at the University of Guelph. Named for former University President Dr. William Winegard, the medal is awarded in recognition of both academic achievement and contributions to the university and community life. One student will be nominated by each College Awards Committee. The Senate Honours and Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application is not required.

**Donor(s):** The Board of Governors' of the University  
**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations who excel both academically and in contributions made to the university and community life.  
**Amount:** 1 award of a Gold medal

#### W.N. Vaughan Medal [C0299]

A medal may be given annually to a student senator who has high academic standing and who has made a substantial contribution to student life and to the university, particularly through involvement in and commitment to Senate activities. Prospective candidates will be nominated by senators and the medal winner will be chosen by a committee selected by the Senate Bylaws and Membership Committee. The medal will be awarded at June convocation. No application is necessary.

**Donor(s):** Friends of Walter N. Vaughan  
**Qualification(s):** Student senator who has high academic standing and who has made a substantial contribution to student life and to the University, particularly through involvement in and commitment to Senate activities.  
**Amount:** 1 award of a Medal

#### Bob and Nancy Burnside Scholarship in Engineering [I1004]

This scholarship was established by Bob and Nancy Burnside to assist students in the B.Eng. program. Students must apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7th. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Selection is based on greatest financial need.

**Donor(s):** Bob and Nancy Burnside  
**Qualification(s):** Students registered in the Bachelor of Engineering program who have completed a minimum of 4.0 credits, but no more than 19.5 credits with a minimum 75% cumulative average and demonstrated financial need.  
**Amount:** 4 awards of $5,000

#### Brian Kenneth Howard Memorial Scholarship [I4548]

Established by Kenneth and Irene Howard in memory of their son, Brian Kenneth Howard. Awarded to a student assessed as having financial need with a preference given to students from York, Durham or Simcoe counties. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Kenneth and Irene Howard  
**Qualification(s):** Students registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.  
**Amount:** 1 award of $3,000

#### C.E.P.S. Dean's Scholarship - ACCESS [I4527]

Established with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. This award may be held once only. ACCESS AWARD.

**Donor(s):** Established by a number of industrial, commercial and public sector corporations with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need registered in an honors program offered by the College of Engineering & Physical Sciences who have completed a minimum of 4.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award. (see General Statements on Awards)  
**Amount:** 1 award of $1,000
### IX. Scholarships and Other Awards, Bachelor of Engineering

#### CEPS Computer Science ACCESS Scholarships [I4551]

Established by the School of Computer Science, friends and alumni and with the aid of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** School of Computer Science, friends and alumni and with the aid of the Ontario government’s OSOTF program.

**Qualification(s):** Students registered in an honours program offered by the College of Engineering & Physical Sciences who have completed 4.0 credits, with demonstrated financial need. Preference will be given to students in the BCOMP program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award. (see General Statements on Awards).

**Amount:** 1 award of $1,800

#### City of Guelph 175th Anniversary Scholarship [I0515]

Funded by a leadership gift from the City of Guelph and donations from business and community leaders, this scholarship was established in 2002. Apply to Student Financial Services by October 7 with a letter describing volunteer activities, one reference letter from an individual familiar with the volunteer and/or community service contributions, and a completed Financial Need Assessment Form (N.A.F.). Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need. This award may be held only once.

**Donor(s):** The Guelph Community Foundation

**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70.0% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.

**Amount:** 1 award of $2,000

#### Earl B. MacNaughton C.E.P.S. ACCESS Scholarships [I4172]

Established by friends, faculty, staff, alumni and students of the University to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical and Engineering Science, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Earl B. MacNaughton with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students currently registered in an honours program in the College Engineering and Physical Sciences with high academic standing, demonstrated financial need, and who have completed a minimum of 15.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award. (see General Statements on Awards).

**Amount:** 2 awards of $1,500

#### Eleanor Morgan & Bill Archibald Scholarships [I4540]

The family of Eleanor and Bill Archibald, with the assistance of the Ontario government’s OSOTF program, provide this scholarship in memory of their parents. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining community involvement to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** The Family of Eleanor & Bill Archibald with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in any program with a minimum of 5.0 credits who have cumulative 70% average, has demonstrated community involvement, and financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award. (See General Statements on Awards).

**Amount:** 1 award of $2,500

#### Erin Demers Memorial Scholarship [I0406]

The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.), along with one supporting reference letter from a Residence Assistant, Residence Manager, or Residence Officer.

**Donor(s):** Family and friends of Erin Katrina Demers

**Qualification(s):** Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

**Amount:** 1 award of $1,800

#### Euclid-Hitachi Scholarships [I4517]

Established by Euclid-Hitachi of Canada Ltd., with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award. (see General Statements on Awards).

**Amount:** 2 awards of $1,500

#### Graham Family Incentive Scholarship [I4506]

Provided by Harvey Graham (O.A.C. ’39) with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** Harvey Graham O.A.C. ’39 with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students entering the fourth year of a four year degree program, maintaining at least a 70% program average and demonstrating financial need, who have previously received the Harvey Graham Bursary. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award. (see General Statements on Awards).

**Amount:** 1 award of $6,000

#### Guelph Campus Co-operative Centennial Scholarship [I0867]

In recognition of the Guelph Campus Co-operative’s centennial anniversary and the students who founded it, this scholarship is awarded to a student who has demonstrated financial need. Preference will be given to students who are members of the Guelph Campus Co-operative. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form and a photocopy of your valid co-operative membership card.

**Donor(s):** Guelph Campus Co-operative

**Qualification(s):** Students registered in any program at the University of Guelph who have completed a minimum of 5.0 credits with a minimum cumulative average of 75% and have demonstrated financial need.

**Amount:** 1 award of $1,000

#### Residence Life Staff Scholarship [I0697]

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date.

**Donor(s):** Student Housing Services

**Qualification(s):** Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program.

**Amount:** 2 awards of $300
**Returning Student Residence Scholarship [I0696]**

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must have resided in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award.

**Donor(s):** Student Housing Services  
**Qualification(s):** Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average.  
**Amount:** 3 awards of $500

**Tara Lynn Giuliani Memorial Scholarship [I0375]**

Funded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form. Selection is based on financial need.

**Donor(s):** Tara Lynn Giuliani Foundation at the Hamilton Community Foundation  
**Qualification(s):** Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services and who have demonstrated financial need. Preference given to students with a visual impairment.  
**Amount:** 1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000

**William & Nona Heaslip Scholarship [I0589]**

Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7th. Recipients of this award can have this award renewed for up to 3 years provided they continue to demonstrate financial need and maintain a minimum 70% cumulative average of full-time (minimum 80% of a full course load) study. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** The William and Nona Heaslip Foundation  
**Qualification(s):** Students that have completed 4.0 credits but no more than 6.0 credits in any degree program; are a Canadian citizen/permanent resident; have a minimum 70% cumulative average; and demonstrate financial need.  
**Amount:** 2 awards of $15,000

**In-course Bursaries**

**Acer Saccharum Bursary [I3083]**

Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and confirmation of registration with Student Accessibility Services.

**Donor(s):** Steven Ardron and Celine Batterink  
**Qualification(s):** Students registered in any degree program at the University of Guelph, who have demonstrated financial need and are registered with Student Accessibility Services.  
**Amount:** 1 award of $1,000

**Brinson Partners Inc. Bursaries [I3526]**

Brinson Partners Inc., with the assistance of the Ontario government’s OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7th. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Brinson Partners Inc. with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 2 awards of $1,500

**Burnbrae Farms Bursaries [I3525]**

Established by Burnbrae Farms, with the assistance of the Ontario government’s OSOTF program to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement explaining interests in poultry science to Student Financial Services by October 7th.  
**Access Award**

**Donor(s):** Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 2 awards of $1,000

**C.E.P.S. Engineering ACCESS Bursary [I3527]**

Established with the aid of the Ontario government's OSOTF program, Apply to Student Financial Services with a completed Needs Assessment Form by October 7th. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.  
**Access Award**

**Donor(s):** Friends and Alumni of C.E.P.S. with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students registered in any program of the engineering programs at or beyond the third semester level with a minimum 65% cumulative average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 1 award of $1,000

**Campbell-Ouellette Family Bursary [I3098]**

Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family’s broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Dr. Malcolm Campbell  
**Qualification(s):** Students registered in any program with demonstrated financial need.  
**Amount:** 1 award of $2,000

**Class of ‘72: 25th Reunion Bursaries [I3512]**

Established by the Class of ‘72: 25th Reunion Fund with the assistance of the Ontario government’s OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7th. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.  
**Access Award**

**Donor(s):** Class of ‘72: 25th Reunion with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 3 awards of $1,000

**David Havoic Bursary [I3087]**

Established by the Havoic family, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to the student with the greatest financial need. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and attach a letter from Student Accessibility Services confirming registration and physical disability.

**Donor(s):** Debbie and David Havoic  
**Qualification(s):** Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.  
**Amount:** 1 award of $1,000

**David R. Leach Memorial Bursary [I3534]**

Provided in memory of David R. Leach by his family, with the assistance of the Ontario government’s OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. ’73 and graduated with a B.Sc. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7th.  
**Access Award**

**Donor(s):** Mrs Deborah Leach-Sartor with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students who are physically disabled as determined by the Student Accessibility Services with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 1 award of $1,000
Denis and Patricia Yates Bursary [I3097]
Established by Charlotte Yates in memory of her parents who were strong advocates for the value of education in society. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): Dr. Malcolm Campbell
Qualification(s): Students registered in any program with demonstrated financial need.
Amount: 1 award of $2,000

Elizabeth Burton Bursaries [I3503]
Mrs. Elizabeth Burton, with the assistance of the Ontario government’s OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

Engineering 1980, ’81, ’82 Bursary [I3578]
The Engineering classes of 1980, 1981, and 1982 understand the commitment it takes to pursue a degree in engineering. This award was created to acknowledge the hard work and perseverance associated with this commitment. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students may receive the bursary only once. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

Donor(s): Alumni in the Engineering classes of 1980, 1981, & 1982 with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in the Bachelor of Engineering program who have completed at least 11.0 but no more than 12.5 credits with demonstrated financial need. Students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $2,000

Gryphon Investment Council Bursaries [I3513]
Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

Donor(s): Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 2 awards of $1,500

Guelph Compassionate Health and Dental Bursary [I3061]
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph’s mandatory Student Health Plan, University of Guelph’s Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment Form; (2) a letter from a physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and its impact on the student’s studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

Donor(s): Student Health and Dental Plan Reserve
Qualification(s): Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student's academic progress.
Amount: Several awards of various amounts to a maximum of $1,500

Guelph Student Assistance ACCESS Bursaries [I3556]
These bursaries have been established and approved by undergraduate students through student referendum with the aid of the Ontario government's OSOTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.
ACCESS AWARD.

Donor(s): Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTSS award (see General Statements on Awards).
Amount: Several awards of varying amounts up to $1,000

Guelph Student Assistance Program [I3056]
These bursaries have been established and approved by undergraduate students through student referendum to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): Undergraduate Students
Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need.
Amount: Several awards of varying amounts up to $1,000

Helen Mahon Memorial Bursary [I3063]
Established in memory of Helen Mahon, a longtime employee of the University of Guelph and who, following the death of her husband, raised three young children alone, all of whom graduated from university. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a statement that indicates you meet the criteria of this bursary. Awarded in the winter.

Donor(s): Family and Friends of Helen Mahon
Qualification(s): Students registered in any program who come from a family where one parent is deceased.
Amount: 1 award of $500
<table>
<thead>
<tr>
<th><strong>Howard and Myrtle Rogers Bursaries [I3537]</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> The Estate of Howard and Myrtle Rogers with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate on-going financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong> 10 up to $2,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Indigenous Student Bursary [I3068]</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In 2009, the Ministry of Advanced Education and Skills Development established the Indigenous Student Bursary as part of their new Aboriginal post-secondary education funding initiative. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with financing their education. Apply to Student Financial Services by October 7th with a Financial Need Assessment Form and complete the Indigenous Student Bursary application. Selection is based on financial need.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Ministry of Advanced Education and Skills Development (MAESD)</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP) and have demonstrated financial need.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong> several awards ranging in values from $1,000 to $3,500</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>International Emergency Medical Aid Assistance [I3059]</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an on-going basis.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> University of Guelph</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong> Several awards of varying amounts</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Irvine and Grace Black Memorial Bursary [I3051]</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established in memory of Irvine and Grace Black, by friends and family to recognize their many contributions to young people. Irvine, a well-known sheep breeder, was a judge at College Royal and the Royal Winter Fair for over fifty years, and Grace was active in the Women's Institute and the Fergus Fall Fair. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining involvement in the 4-H Club and/or a Women's Institute by October 7.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Family and friends of Irvine and Grace Black</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to applicants who are, or have been, active in the 4-H Club and/or a Women's Institute.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $500</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ivey Cook Bursaries [I3076]</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply to SAS using the &quot;New Student Intake Form&quot; and a letter explaining your situation and attach documentation showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first come first served basis, based on the validity and need for an assessment.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Suzanne Ivey Cook</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong> several awards of up to $1,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>John &amp; Margaret Van Loon Family Bursary in Science [I3549]</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established on behalf of the Van Loon Family in honour of parents John &amp; Margaret Van Loon. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Mr. Paul Van Loon and Mrs. Lauralene Van Loon</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any program in the College of Biological Science or the College of Physical &amp; Engineering Science who have completed a minimum of 2.5 credits. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $1,500</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Lindsay W. Christie Bursary [I3004]</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Made available by the family of Lindsay W. Christie. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form (NAF).</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Family of Lindsay W. Christie (Fastforms Inc.)</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time students in the B.ENG. program with a demonstrated financial need.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong> Several awards totalling 1000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Madison Gough Memorial Bursary [I3103]</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the friends and family of Madison Gough, a gentle, kind spirit who was inspired by nature, animals, or music and passionate about acceptance of difference. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Bob Gough and Laura Ladouceur</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any program who have demonstrated financial need.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $1,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Mary L. Whitelock Bursaries [I3524]</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Estate of Mary L. Whitelock with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong> 13 awards of $2,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Métis Nation of Ontario Bursary [I3092]</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and a statement confirming Métis status and include your card number.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Métis Nation of Ontario</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $1,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Murray McEwen Engineering Safe Water Bursary [I3572]</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection will be based on the highest financial need. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Murray McEwen with matching funding through the Ontario Trust for Student Support program</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in the Water Resources Engineering major who have completed a minimum of 11.5 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong> 4 awards of $1,500</td>
<td></td>
</tr>
</tbody>
</table>
Norma Valeriote International Student Bursaries [13009]
Preference given to a student from a country of focus as defined by CIDA (Canadian International Development Agency). Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.
Donor(s): Mrs. Norma L. Valeriote
Qualification(s): International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.
Amount: Several of varying amounts

O.A.C. '55 Access Bursaries [13517]
Provided by the class of O.A.C. '55 with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.
Donor(s): O.A.C. Class of '55 with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students at any semester level in an O.A.C. degree program or students enrolled in the B.ENG. program, with demonstrated financial need and a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).
Amount: several awards of varying amounts

Ontario Co-operatives R.P. Forshaw Bursary [13013]
The Co-operatives, Credit Unions, friends and associates of Prof. R. P. Forshaw have established this bursary. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7 and a letter indicating membership of co-op or credit unions.
Donor(s): The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw
Qualification(s): Undergraduate students who have financial need. Preference may be given to candidates who have been or are members of a co-operative or credit union.
Amount: 1 award of $400

Ontario First Generation Bursary [13062]
The Ministry of Advanced Education & Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.
Donor(s): Ministry of Advanced Education & Skills Development (MAESD)
Qualification(s): Students registered in any program who are first generation students, Ontario residents (as defined by OSAP) and who have demonstrated financial need.
Amount: several awards ranging in values from $1,000 to $3,500

Procor Ltd. Access Bursary in Engineering [13528]
Established with the aid of the Ontario government's OSOTF program. Apply to Student Financial Services with a completed Needs Assessment Form by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.
Donor(s): Procor Ltd. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any of the engineering programs at or beyond the third semester level with a minimum 65% cumulative average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $800

Ron Scriver Memorial Bursary [13547]
Established in memory of Mr. Ron Scriver (1946 - 2005) C.E.P.S B.A. '76, to honour his outstanding 32-year career with the Ontario Universities' Application Centre and his extensive involvement with colleagues throughout the University system. Preference will be given to students registered in the Bachelor of Computing Science Program. Apply with a Financial Need Assessment Form to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.
Donor(s): Family and Friends of Ron Scriver with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any program offered by C.E.P.S with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 1 award of $2,000

Scotiabank Bursaries [13532]
Established by Scotiabank, with the assistance of the Ontario government's OSOTF program, to assist students with financial need to continue their studies as full-time students. Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.
Donor(s): Scotiabank with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 2 awards of $1,500

Shirley Endean Bursaries [13570]
These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD
Donor(s): Estate of Shirley E. Endean & multiple donors with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: Several awards of varying amounts

Student Financial Services Bursary [13107]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.
Donor(s): University of Guelph
Qualification(s): Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.
Amount: Several awards up to a maximum of $6,000

Uffelmann Connor Family Bursary for Indigenous Students [13109]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Métis or Inuit).
Donor(s): Maris Uffelmann and Dean Connor
Qualification(s): Students registered in any program who self-identify with First Nations (Status and non-Status), Métis or Inuit ancestry and who demonstrates financial need.
Amount: 1 award of $1,000

Uffelmann Connor Family First Generation Bursary [13108]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as a first-generation student.
Donor(s): Maris Uffelmann and Dean Connor
Qualification(s): Students registered in any program who is a first-generation student (First generation students (parents did not attend post-secondary studies, full-time or part-time, in or outside Canada at any time or in any program) registered in any program with demonstrated financial need and who demonstrates financial need.
Amount: 1 award of $1,000
### University of Guelph Access Bursaries [I3522]
Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Alumni and Friend of the University of Guelph with matching funding through the Ontario Student Opportunities Trust Fund  

**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  

**Amount:** Several awards of $500, Several awards of $2,000

### University of Guelph Alumni Association Access Bursaries [I3523]
Established by the University of Guelph Alumni Association, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** University of Guelph Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund  

**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  

**Amount:** 1 award of $1,250

### University of Guelph International Bursary [I3048]
The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Students should apply to the International Student Advisor by Nov. 1 for the fall semester; March 1 for the winter semester, and July 2 for the summer semester with a completed International Student Financial Need Assessment Form (N.A.F.). If students have an emergency situation, please contact the International Student Advisor, in Student Life, University Centre, Level 3.

**Donor(s):** University of Guelph  

**Qualification(s):** International students registered in a degree program who have competed a minimum of 4.0 credits and are registered in a minimum of 1.5 course credits.  

**Amount:** Several varies

### University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [I3047]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  

**Qualification(s):** Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.  

**Amount:** Several awards to a maximum of $2,000

### University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  

**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.  

**Amount:** Several awards up to a maximum of $6,000

### University Student Assistance Program [I3057]
These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  

**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).  

**Amount:** Several awards of various amounts to a maximum of $1,000
### Bachelor of Landscape Architecture

Please refer to the General Statement on Awards for:
- Award Eligibility
- ACCESS Awards Eligibility
- Ontario Student Opportunity Trust Fund (OSOTF) Program
- How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

### Entrance Scholarships

**Amos & William Lowe Memorial Scholarship [E0158]**

Endowed by the late William B. Lowe of Fort Francis, Ontario. Preference will be given first to eligible students from the district of Rainy River, then from the district of Kenora or Thunder Bay, and finally from the remaining districts of Northern Ontario. Application is not required.

**Donor(s):** William B. Lowe and Amos Edgar Lowe

**Qualification(s):** Student entering any of the undergraduate degree programs of the Ontario Agricultural College.

**Amount:** 1 award of $2,000

**Angelo and Frank Agro Undergraduate Scholarship [E0520]**

These scholarships are provided by the Agro Scholarship Fund. Apply, by April 15, to Student Financial Services (awards@uoguelph.ca), with a one to two-page, point-form listing of 4-H activities. This list should describe current or past activities within 4H and the position titles/names, if applicable. Attach a reference letter from a 4H club official. These scholarships will be awarded to the students demonstrating the most active involvement with 4H clubs. The committee will consider any appropriate elements, such as the length of membership in 4H, leadership role(s) in support of 4H, creativity in 4H outreach, and coordination with other rural and academic activities. Credit will be given to those who have achieved in county, provincial and national 4H competitions. Recipients must maintain full-time studies and at least a 70% program average each year for continuation of the award.

**Donor(s):** The Frank Agro Estate

**Qualification(s):** Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 - 4H projects.

**Amount:** 7 awards of $7,000 (payable over 4 years of study)

**Atkinson Family Scholarship [E0972]**

Established by the Atkinson Family in honour of Walter McFee and Johnny Atkinson for their passion for farming, family and community. Selection will be based on highest admission average. No application required.

**Donor(s):** Amy and Bryan Atkinson

**Qualification(s):** Students entering any degree program offered by the Ontario Agricultural College (OAC).

**Amount:** 1 award of $1,000

**Barry Lee Scholarship for Agricultural Excellence [E0797]**

Established to recognize Barry Lee’s 19 years of service as a Counsellor and his strong support of rural and agricultural activities in the region. Preference will be given to students from the Regional Municipality of Halton. Selection will be based on highest admission average. No application is required.

**Donor(s):** Regional Municipality of Halton

**Qualification(s):** Students entering any undergraduate program offered by OAC.

**Amount:** 1 award of $1,000

**Board of Governors’ Scholarships [E0317]**

This scholarship is considered one of the University of Guelph's most prestigious entrance scholarships with only 25 awards being awarded each year. Recipients of this scholarship are entering their program with one of the highest admission averages of that cohort. The scholarship will be renewed each year provided recipients remain registered in full-time studies and achieve a minimum 80.0% average in their previous academic year of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80.0% or better average in the previous academic year of full-time study. Payments lost cannot be added to the end of the award period. This award cannot be held with the President’s, Lincoln Alexander Chancellor’s or Chancellors’ Scholarships. Application is not required.

**Donor(s):** Board of Governors

**Qualification(s):** Academically outstanding entering students with the highest admission averages of the entering cohort.

**Amount:** 25 awards of $20,000 (payable over 4 years of study)

### Chancellor’s Scholarships [E0688]

This scholarship was established in 2009 in honour of current and past University of Guelph Chancellors and is considered one of the most prestigious entrance awards offered by the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the President’s Scholarships, the Lincoln Alexander Chancellor's Scholarships, or the Board of Governors’ Scholarships.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a degree program with a minimum 90% admission average who have taken leadership roles in activities that demonstrate an interest in international relations and development, or leadership roles in activities relating to arts and culture and demonstrate the potential to become a leader in society.

**Amount:** 2 awards of $2,000 (payable annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

**Dr. C. John Small Commonwealth Scholarship [E0611]**

Established in honour of Dr. C. John Small, OAC BSA ’42, Hon. D. Law ’75, and his lifelong dedication to foreign service. Selection will be based on the assessment of:

1. a one-page submission describing the significance for the student visiting Guelph to the program of study at the partner exchange University;
2. two faculty references of no more than one-page each;
3. consistent high performance in course work completed as documented by a transcript of grades to date.

Apply to the Centre for International Programs by May 1 for visiting during the subsequent Fall or Winter semesters with the above mentioned documents.

**Donor(s):** Mrs. Jean K. Small

**Qualification(s):** Full-time visiting exchange students registered for at least one semester from a Commonwealth developing country who are pursuing studies or conducting research in the area of agriculture and rural development.

**Amount:** 1 award of $1,500

**Dr. Jack Britney Scholarship [E0034]**

Established in memory of Dr. Jack Britney, a graduate of ’57A and O.A.C. ’60 and former faculty member in the former School of Food Agriculture and Resource Economics and Extension Education. Selection will be based on the students entering with the highest admission average. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a statement indicating the program and where the Diploma was taken and when.

**Donor(s):** Friends and Associates

**Qualification(s):** Students entering any OAC degree program with a preference given to students who graduated from any University of Guelph Associate Diploma program.

**Amount:** 1 award of $1,750

**Ed Carter/University of Guelph Faculty Association Scholarship [E0292]**

Award is payable at $750 per annum in the student’s 1st, 3rd, and 5th semester levels, provided a cumulative average of at least 70% is maintained. To receive the final payment, the recipient would normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.

**Donor(s):** University of Guelph Faculty Association

**Qualification(s):** Students entering any undergraduate degree program at the University of Guelph from Wellington county.

**Amount:** 1 award of $2,250 ($750 in the 1st, 3rd, and 5th semesters)

**Gordon W. Innes Scholarship [E0140]**

Application is not required.

**Donor(s):** Gordon W. ’Sparky’ Innes Scholarship Fund Committee of the Woodstock Agricultural Society.

**Qualification(s):** Student entering any degree program from Oxford County with the highest admission average.

**Amount:** 1 award of $1,000

**Hardy International Student Scholarship [E0659]**

Selection is based on the assessment of the student’s admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.

**Donor(s):** Mrs. Marion Hardy

**Qualification(s):** Full-time international students (defined as paying the international student tuition and fees) entering any degree program.

**Amount:** 1 award of $2,000
### International Student Entrance Scholarships [E0408]

In support of the University's strategic direction of internationalism, entrance scholarships are available each Fall term to the top 100 international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all required documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.

**Donor(s):** University of Guelph  
**Qualification(s):** Students on a "student visa" entering an undergraduate degree program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.  
**Amount:** Several awards ranging in value from $5,500 - $8,500

### J.D. MacLachlan Scholarship [E0170]

Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.

**Donor(s):** The J.D. MacLachlan Trust  
**Qualification(s):** Students entering any degree program at the University of Guelph.  
**Amount:** 1 award of $1,500

### Jack and Lillian MacDonald Scholarship [E0379]

Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, and their families, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

**Donor(s):** Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald  
**Qualification(s):** Entering students coming from the Six Nations Polytechnic (SNP).  
**Amount:** 1 award of $900

### James MacMillan Memorial Scholarship [E0494]

Established in memory of James MacMillan, his great uncle, by Austin Conway of Toronto. Selection will be based on highest cumulative average. Application is not required.

**Donor(s):** Austin Conway  
**Qualification(s):** Students entering any program offered by OAC who graduated from the OAC Specialist High Skills Major Program Scholarships (SHSM) [E0832]  
**Qualification(s):** Students entering any OAC undergraduate program with a minimum 75% admission average who are/were registered in the Specialist High Skills Major (SHSM).  
**Amount:** 3 awards of $1,000

### Lincoln Alexander Chancellor’s Scholarships [E0689]

Established in 2001 in honour of Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This award cannot be held with the President’s Scholarships, the Chancellor’s Scholarships or the Board of Governors’ Scholarships.  

**Donor(s):** Many Donors  
**Qualification(s):** Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.  
**Amount:** 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistance)

### McArthur-Humphries Scholarship [E0183]

An equal number of awards are available to students from each county. In the case of insufficient eligible applicants from one county, the awards will be given to eligible applicants from the other county. These scholarships are awarded to students with the highest admission average. Application is not required.

**Donor(s):** Wilhelmina McArthur-Humphries Trust Fund  
**Qualification(s):** Students entering any degree program with a minimum 75% admission average from Lanark and Wellington Counties.  
**Amount:** 8 awards of $1,000

### OAC 1968 Scholarship [E1008]

The Class of OAC 1968 established this bursary to celebrate their 50th anniversary. In reflecting on many of their own experiences the class generously supports undergraduate students in any OAC program with demonstrated financial need. Selection will be based on greatest financial need. Students must maintain enrolment in an OAC academic program to maintain their award. Students do not need to continue to demonstrate financial need for all 4 years to continue to receive this award. Apply by April 15 with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) and a summary of agriculture related activities to Student Financial Services (awards@uoguelph.ca).

**Donor(s):** The Class of OAC 1968  
**Qualification(s):** Students entering any OAC degree program who have demonstrated financial need. Preference will be given to students who participated in agriculture-related activities/organizations during their high school career such as Junior Farmers or 4-H.  
**Amount:** 1 award of $10,000 (payable over 8 semesters)
**President's Scholarship [E0238]**

Established in 1987 in honour of their donors or distinguished members of the University and are considered one of the most prestigious entrance awards at the University of Guelph. Selection will be based on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the Chancellors' Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Board of Governors’ Scholarships.

**Donor(s):**
A number of President's Scholarships have been named in honour of the following people and/or donors:

**Cecil H. Franklin and Ingrid Franklin**
In honour of Cecil Franklin, former Chair of the Board of Governors and Honorary Fellow of the University, the University of Guelph has named one of these twelve prestigious entrance awards to recognize his financial contributions and volunteer support to the President's Entrance Scholarship program.

**Charles S. Humphrey**
In memory of Charles S. Humphrey, a former President of Hart Chemical Company Canada Ltd. and long-time friend, the University has named one of these twelve prestigious entrance awards to recognize his financial contribution through his estate to the President's Entrance Scholarship program.

**Jack R. Longstaffe**
The University of Guelph has named one of these twelve prestigious entrance awards in memory of Jack R. Longstaffe to recognize his financial contribution through his estate to the President's Entrance Scholarship program.

**Burton C. Matthews**
The University of Guelph has named one of these twelve prestigious entrance awards in honour of Burton C. Matthews to recognize his insight and leadership in establishing the President's Entrance Scholarship program.

**Kathleen and Frederick Metcalf**
Mr. and Mrs. F.T. Metcalf of Guelph have endowed this award. After a distinguished career in cable TV, broadcasting and publishing, the late Mr. Metcalf retired as President of Maclean Hunter Cable Ltd. He was Honorary Chairman of Maclean Hunter Cable Ltd. and a member of the University of Guelph Heritage Board (1996).

**Rol-land Farms Limited**
Two of the scholarships are endowed by the four shareholders of Rol-land Farms Limited of Blenheim, Ontario, Hank, Peter, Arthur and Eric Vander Pol and their families. The Vander Pol families are generous supporters of a number of University projects and programs.

**Lillian Stewart Usher**
The University of Guelph has named one of these twelve prestigious entrance awards in honour of Lillian Stewart Usher, a friend of the University to recognize her financial contribution through her estate to the President's Entrance Scholarship program.

**Qualification(s):**
Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and/or communities.

**Amount:**
8 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistance)

---

**Project Hero Scholarship [E0979]**

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary L.t. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship program, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):**
University of Guelph

**Qualification(s):**
Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

**Amount:**
Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

---

**Quinn Memorial Scholarship [E0578]**

Established in memory of Ronald J. Quinn (O.A.C. '35) to an entering O.A.C. full-time or exchange student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package.

Application is not required.

**Donor(s):**
Mrs. Helen Quinn (O.A.C. '35)

**Qualification(s):**
Entering semester one of an O.A.C. program to an international full-time or exchange student with a preference to those students from developing nations.

**Amount:**
1 award of $2,000

---

**Ted Morwick Scholarship [E0796]**

Established by Ted Morwick, honorary alumni. The student with the highest admission average will be selected. This award is conditional on maintaining a 90% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify. (i.e. The student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year.) If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with the Chancellors’, President’s or Board of Governors’ Scholarships. No application is necessary.

**Donor(s):**
Mr. Edward (Ted) Morwick

**Qualification(s):**
Students entering any degree program in the College of Arts.

**Amount:**
4 award of $8,000 (payable over four years.)

---

**University of Guelph Entrance Scholarships [E0291]**

The value of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student's financial account in two equal payments in the fall and winter semesters. Application is not required.

**Donor(s):**
University of Guelph

**Qualification(s):**
Students entering their first year of post-secondary studies for the first time with a minimum 85.0% admission average.

**Amount:**
Several awards of $2,000, Several awards of $3,000
W. Penri Morris Memorial Scholarship [E0430]
Established by the family in memory of Penri Morris, who was killed World War II action in 1944 at the age of 21. Penri grew up on the family fruit farm near Forest, Ontario. After graduating from high school, he joined the Royal Canadian Air Force and was attached to the Royal Air Force Bomber Command as a navigator at the time of this death. Awarded to the student with the highest cumulative academic performance above 75% in all courses of the last year in high school study (full-time or equivalent study). Application is not required.

**Donor(s):** Prof. Rosalina Morris  
**Qualification(s):** Students entering first year of any undergraduate program from North Lambton Secondary School in Forest, Ontario, in their absence, from Lambton County, and their absence, from Ontario.  
**Amount:** 1 award of $1,000

Walter and Halina Slabikowski Scholarship [E0766]
This scholarship was established in memory of Walter and Halina Slabikowski who sent their first generation Canadian born children to university to enrich their lives and provide them with greater opportunities. The award will be given to the student with the highest admission average. The residence deposit must be received by published deadline date. Submit by email to awards@uoguelph.ca your full name, student ID number and a statement attesting to your parents’ place of birth and non participation in post secondary education by April 15th.

**Donor(s):** Irene Thompson and Slabikowski Family  
**Qualification(s):** Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary studies.  
**Amount:** 1 award of $1,000

Waterloo-Wellington Science & Engineering Fair (WWSEF) Scholarship [E0619]
Established to recognize excellence of the project submissions and encourage students to pursue university studies at the University of Guelph.

**Donor(s):** University of Guelph  
**Qualification(s):** Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.  
**Amount:** various awards of $1,000

Entrance Scholarships with Financial Need

**Bill Klopp Memorial Scholarship [E0150]**
Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by April 15. Students should complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

**Donor(s):** Ross and Mary Lou Klopp  
**Qualification(s):** Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.  
**Amount:** 1 award of $500

**Devine Family Scholarships [E4542]**
Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of Governors member, with the assistance of the Ontario government's OSOTF program. These scholarships will be given out once every four years, unless the incumbent fails to qualify. The scholarship is renewed in years two, three and four with continued demonstrated financial need and full-time registration; students are required to register for no less than 2.0 credits each semester. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the "Devine Family Scholarship Application". Deadline to submit the complete application (both parts, the E.N.A.F. and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Chancellors' Scholarships, but can be held with all other entrance awards. ACCESS AWARD.

**Donor(s):** Mr. Peter J. Devine with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students who are Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person entering any University of Guelph undergraduate degree program with a minimum 80% admission average. Preference will be given to students who are Black Canadians. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** up to 2 awards of $50,000 each (payable over 4 years of study)

**Interhall Council Entrance Scholarship [E0636]**
Established by the Interhall Council, the residence student government that programs, advocates and represents residence students to administration and Student Housing Services (www.interhall.ca), to ensure that the residence experience remains accessible to students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15.

**Donor(s):** Interhall Council  
**Qualification(s):** Students entering a full-time undergraduate degree program with a minimum 85.0% admission average, residing in residence during first year on the Guelph campus with demonstrated financial need and demonstrated strong leadership ability.  
**Amount:** 5 awards of $1,000

**Kenneth O. Hammill-Blount Canada Scholarship [E4356]**
Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government's OSOTF program. Selection will be based on greatest financial need from the President’s, Lincoln Alexander Chancellor’s or Chancellors’ Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President’s, Lincoln Alexander Chancellor's or Chancellors' Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. ACCESS AWARD.

**Donor(s):** The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Entering students who have applied for the President's, Lincoln Alexander Chancellor’s or Chancellors’ Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 1 award of $9,600 (payable in 8 payments of $1,200)
L. Norman Gibbins Microbiology Scholarship [E4392]
Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government's OTSS program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): Family, friends and colleagues of Norman Gibbins with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering the Microbiology major in the B.Sc. program with a minimum 80% admission average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTFE award (see General Statements on Awards).

Amount: 1 award of $2,500

OAC 1966 Entrance Scholarship [E0903]
In recognition of the contribution made to our lives by the Ontario Agricultural College, the graduates of 1966 O.A.C have established this scholarship to assist a well-qualified student to come to Guelph and become an “Aggie”. Students must complete the online Entrance Financial Need Assessment form as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted) or by April 15.

Donor(s): Class of OAC 1966

Qualification(s): Students entering any degree program offered by O.A.C with demonstrated financial need and are Ontario residents.

Amount: 2 awards of $5,000

P.A.J. Clarke Family Scholarship [E0381]
Paul and Aileen Clarke and their family established the endowment for this entrance scholarship in honour of Paul’s father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining extracurricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not a requirement. This award is not tenable with the President’s Scholarships or Lincoln Alexander Chancellor’s Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

Donor(s): Paul and Aileen Clarke

Qualification(s): Students with a minimum 80% average with a record of leadership and community participation. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm.

Amount: 1 award of $12,000 (payable over 4 years)

Robert C. Skipper Scholarship [E0485]
Established by Robert C. Skipper, Diploma in Agriculture 1948 and B.S.A. 1951. Selection will be based on academic standing, participation in extra-curricular activities and involvement in primary production and/or rural community activities. Financial need may also be considered. Apply to Student Financial Services (awards@uoguelph.ca) by April 15 with a one-page summary outlining activities and by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).

Donor(s): Mr. Robert C. Skipper

Qualification(s): Students entering a degree program in O.A.C that have graduated with a Diploma in Agriculture or Horticulture from the University of Guelph’s Ridgeway campus.

Amount: 1 award of $750

Rol-Land Farms Scholarships [E4519]
Established by Rol-Land Farms, with the assistance of the Ontario government’s OSOTFE program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): Rol-Land Farms with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students entering a degree program with demonstrated financial need and a minimum 80% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTFE award (see General Statements on Awards).

Amount: 13 awards of $2,000

Entrance Bursaries

Dorothy Wright Entrance Bursary [E3075]
Established in memory of Miss Dorothy Wright, sister, and Miss Dorothy Wright, aunt, of Mr. Ivor Wright, OAC 65A. This bursary supports students entering any undergraduate degree program offered by the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15.

Donor(s): Mr. R. Ivor Wright

Qualification(s): Students entering any OAC degree program who have demonstrated financial need.

Amount: 1 award of $1,000

Elizabeth Maud Hunter (Shier) Bursary [E3575]
This award was created to assist first year students in obtaining a post secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing a similar situation. Preference given to a student from the County of Brock. Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F.) for Entrance Awards. ACCESS AWARD

Donor(s): The Estate of the Late William Henry "Harry" Hunter with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering any degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 3 awards of up to $4,500

First Year Student Residence Bursary [E3066]
These 5 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the online Financial Need Assessment Form for Entrance Awards by April 15.

Donor(s): Student Housing Services

Qualification(s): Students entering any degree program with demonstrated financial need.

Amount: 5 awards of $500

Fred Hindle Bursary [E3500]
Awarded in memory of Fred Hindle, O.A.C.'38, a long-time generous supporter of his Alma Mater, who at the time of his death, wanted future students to have the same opportunity for an education as he had received. This bursary is awarded with the assistance of the Ontario government's OSOTFE program. This bursary is dependent on continued demonstration of financial need and successful completion of study to advance into the next year. Students should complete the online Financial Need Assessment Form (N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD.

Donor(s): W. Roy Hindle and family with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Entering O.A.C. degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTFE award (see General Statement on Awards).

Amount: 1 award of $6,000 (payable over 4 years)

Harvey Graham Bursary [E3030]
Provided by Harvey Graham (O.A.C. ’39). Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a working farm and complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

Donor(s): Harvey Graham, O.A.C. ’39

Qualification(s): Students entering any degree program who come from a working farm and who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or L.E. Weldon Secondary School.

Amount: 1 award of $1,500
### International Student Entrance Bursaries [E3043]
In support of the University’s strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students entering an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar’s Entrance Award Application to Student Financial Services.

**Donor(s):** University of Guelph  
**Qualification(s):** Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.  
**Amount:** Several awards ranging in value from $1,000 to $3,000

### John A. Carther Bursary [E3086]
The late John A. Carther of Cornwall Ontario has created the John A. Carther Bursary to support students from Eastern Ontario. Preference will be given to students from the counties of Stormont, Dundas and Glengarry. Apply to Student Financial Services by April 15th by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).

**Donor(s):** The estate of John A. Carther  
**Qualification(s):** Students entering any program offered by the Ontario Agricultural College with demonstrated financial need.  
**Amount:** 1 award of $2,000

### McCracken Family Bursaries [E3580]
Ron and Doreen McCracken from Scotland Ontario have created these bursaries in memory of his mother and father who farmed near Cobourg Ontario. These bursaries will provide opportunities for students to study agriculture and food at the OAC. Preference will be given to students who have graduated from high school with a Specialist High Skills Majors Program (SHSM). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. ACCESS AWARD.

**Donor(s):** Ron and Doreen McCracken with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students entering any undergraduate degree program offered by OAC with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSSG award (see General Statements on Awards).  
**Amount:** 5 awards of $3,000

### Registrar’s Entrance Bursaries [E3034]
Established by the University of Guelph to support entering undergraduate students with identified financial need. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Bursary, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph  
**Qualification(s):** Students entering any degree program with a minimum registration of 1.5 credits and demonstrated financial need.  
**Amount:** 500 awards of $4,000

### Robert Arthur Stewart Bursaries [E3272]
Established in memory of Mrs. Elsa H. Stewart of Pakenham, Ontario. Mr. Stewart graduated from the Ontario Agricultural College in 1933 and Mrs. Stewart from Macdonald Institute in 1932. Applicants for these bursaries should have a good academic record and an active interest in community affairs. A letter from the student and a recommendation from the County agricultural representative or the secondary school principal should be sent to Student Financial Services by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

**Donor(s):** The Estate of Mrs. H. Stewart  
**Qualification(s):** Students from the Ontario Counties of Lanark and Renfrew, and the Regional Municipality of Ottawa-Carleton, entering the 1st semester of a degree program at the University of Guelph.  
**Amount:** 14 awards of $1,000

### Steven Jones Memorial Bursaries [E3077]
Established by Mr. and Mrs. Jones in memory of their late son, Steven Jones (B.Comm. ’97). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. Selection will be made on demonstrated financial need.

**Donor(s):** Mr. Harry Jones  
**Qualification(s):** Students entering any degree program with demonstrated financial need.  
**Amount:** several awards of $2,000

### University of Guelph Accessiblity Bursaries [E3038]
Established by the University of Guelph to support students with substantial demonstrated financial need. In addition, students will be automatically approved for to participate in the work-study program conditional on the student securing a work-study approved position on campus. Participating in the work-study program is not required to hold this bursary. Payments of this award and the eligibility to participate in the work-study program are conditional upon the recipient receiving funding through their provincial/territorial and/or federal student loan assistance program and registration in a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the Registrar’s Entrance Bursary, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph  
**Qualification(s):** Students entering any degree program with demonstrated financial need and a minimum registration of 1.5 credits.  
**Amount:** 200 awards of $14,000 (payable over 4 years) plus Work-study approval

### In-course Scholarships

#### Aboriginal Student Engagement Scholarship [10922]
Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA’s commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status), Métis or Inuit and outline volunteer/leadership experience within the Aboriginal community. The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but not be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

**Donor(s):** Aboriginal Student Association  
**Qualification(s):** Students registered in any program who self-identify as First Nation (status and non-status), Métis or Inuit, who are engaged in the Aboriginal community either in their home community or at the University of Guelph.  
**Amount:** 1 award of $1,000

#### Alumni House Call Centre Scholarship [11020]
Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15 with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

**Donor(s):** Former Employees of the Alumni House Call Centre  
**Qualification(s):** Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.  
**Amount:** 1 award of $1,000

#### Bill Taylor Memorial Scholarship [10280]
Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.

**Donor(s):** AMF Canada Ltd.  
**Qualification(s):** Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or intercollegiate athletics.  
**Amount:** 1 award of $900
Blackburn Scholarship [I0404]
In commemoration of the 125th Anniversary of the Ontario Agricultural College, Dr. D.J. Blackburn, a retired faculty member of the former Rural Extension Studies program and former Director of the Associate Diploma Program, has established this scholarship. Apply by letter, citing academic contributions, to the O.A.C. Awards Committee (oaward@uoguelph.ca) by May 15. Please include our name, student ID number and the name of the award on your application.

Donor(s): D.J. Blackburn
Qualification(s): O.A.C. degree or diploma student who has participated in intercollegiate athletics and maintained a minimum cumulative average of 70% while registered at Guelph. Athletic excellence and leadership will be used to determine the recipient. Students who have completed up to 3 years of study are eligible.

Amount: 1 award of $1,000

Braithwaite Business Scholarships [I0827]
Named in honour of Professor Bill Braithwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15 with a resume and 500-word statement describing why business courses, in addition to their major, will benefit their future career. Shortlisted applicants may be invited for an interview with the LANG Awards Committee. Selection is based on the student who best describes why taking business courses, in addition to their major, will benefit their future career. Students may hold this award only once.

Donor(s): Anonymous
Qualification(s): Students registered in any degree program, with the exception of B.Comm., who have successfully completed 1.0 credits towards the Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150 Introduction to Canadian Business or students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) who have completed 1.0 credits towards the minor. 10 5000(payable over 2 semesters)

Bridge Builder Scholarship [I1050]
The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Apply to Student Financial Services by May 15th with a one page letter outlining the volunteer activities that lead to social connections, breaking down barriers, and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people through one or more of the following: Civic engagement by facilitating community engagement, social integration and volunteering to promote inclusion for immigrant and ethno-cultural communities; Social connections by promoting social connections and employment networking, including programs that reduce barriers and increase support for vulnerable groups; Education and empowerment by promoting intercultural understanding and break down barriers to participation in community life and decision-making. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.

Donor(s): Muslim Society of Guelph
Qualification(s): Students registered in any program who, through volunteer activities in the local community, have demonstrated a passion and commitment for building bridges in one or more of the following ways: facilitating social connections; breaking down barriers; and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people.

Amount: 1 award of $1,000

Canadian Heritage Garden Foundation Scholarship [I0551]
The Canadian Heritage Garden Foundation provides this scholarship to a student registered in Landscape Architecture that has demonstrated creativity and excellence in planting design. Examples might include heritage, residential, ecological, park and designs which explore pest control issues. Preference will be given to students with an interest in roses. Application is not required.

Donor(s): The Canadian Heritage Garden Foundation
Qualification(s): Students registered in Landscape Architecture who have completed 10.5 credits.

Amount: 1 award of $1,500

Canadian Society of Landscape Architects Prize - B.L.A. [C0136]
Application is not required.

Donor(s): The Canadian Society of Landscape Architects
Qualification(s): Student graduating from the Bachelor of Landscape Architecture program who has maintained a high academic standing and contributed to the School and the profession.

Amount: 1 award of $1,000

CFRU Volunteer Scholarship [I0215]
The award is presented to the student who has made the most significant contribution to the operation and goals of CFRU. Apply to Student Financial Services by May 15 with a letter describing the contributions made as a volunteer with CFRU and how those contributions have supported the operation and furthered the goals of CFRU.

Donor(s): CFRU Alumni
Qualification(s): Students registered in any program with a minimum cumulative average of 70% who have volunteered at CFRU for at least one year.

Amount: 1 award of $1,000

Charles McGowan Memorial Prize [C0187]
Established in memory of the late Lieutenant Charles McGowan. Application is not required.

Donor(s): Charles McGowan Memorial Fund
Qualification(s): Outstanding graduating student in an O.A.C. degree program.

Amount: 1 award of $200

Christina Victoria Kenny Memorial Scholarship [I1018]
The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.

Donor(s): Family and Friends of Vikki Kenny
Qualification(s): Students registered in any program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.

Amount: 1 award of $1,000

Class of ‘51 O.A.C. Leadership Prizes [C0063]
Established by Year ‘51 O.A.C., on the occasion of its 45th anniversary. Selection will be based on significant demonstrated leadership in College and/or University extracurricular activities. Apply to the OAC Awards office (oaward@uoguelph.ca) by April 1 with a letter outlining your demonstrated leadership in College and/or University extracurricular activities. Please include our name, student ID number and the name of the award on your application.

Donor(s): Year ‘51 O.A.C.
Qualification(s): Students who have graduated or are graduating in the previous Fall or Winter semesters from any degree or associate diploma program in the OAC, Guelph campus.

Amount: 5 awards of $3,000

Class of ’67 O.A.C. Centennial Scholarship [I0067]
Apply by May 15 to the OAC Awards office (oaward@uoguelph.ca) with a letter outlining participation in extracurricular activities in all branches of college life. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

Donor(s): Class of O.A.C. ’67
Qualification(s): Student majoring in an O.A.C. department who through activity in all branches of college life as well as scholastic achievement has made an outstanding contribution to the University.

Amount: 2 awards of $2,000

Class of 1970 Scholarship [I0424]
Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.

Donor(s): Class 1970: 25th Reunion Gift
Qualification(s): Outstanding student in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Deans’ Honours List.

Amount: 1 award of $1,400

Clayton and Dorothy Switzer Scholarships [I0276]
Apply by May 15th to the OAC Awards office (oaward@uoguelph.ca) with a letter outlining how you have demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

Donor(s): Clayton and Dorothy Switzer
Qualification(s): Students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) or students registered in Business courses, in addition to their major, will benefit their future career. Students may hold this award only once. Shortlisted applicants may be invited for an interview with the LANG Awards Committee.

Amount: 1 award of $1,000

Donor(s): Clayton and Dorothy Switzer
Qualification(s): Students registered in a degree program offered by O.A.C. with a minimum of 10.0 credits completed, at least a 70% cumulative average and has demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal.

Amount: 1 award of $2,500
**Dairy Challenge Prize [I0811]**

Supported by The Madsen Dairy Cattle Research Fund, the Dairy Challenge Prize will be awarded to students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge. No application is required.

**Donor(s):** Madsen Dairy Cattle Research Fund  
**Qualification(s):** Students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge.  
**Amount:** several awards up to $2000

**David F. Boyes Apiculture Scholarship [I0031]**

Established in memory of David Boyes, a technician in the Apiculture Field Laboratory. Application is not required.

**Donor(s):** The Apiculture Club  
**Qualification(s):** Student registered in the Fall semester who achieves high academic standing in Introductory Apiculture (ENVB*2210) in the previous year, demonstrates an interest in apiculture and has participated in extracurricular activities.  
**Amount:** 1 award of $200

**Dean’s Scholarships [I0323]**

This award was established by the Board of Governors’ in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.

**Donor(s):** Board of Governors  
**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.  
**Amount:** 150 awards of $2,000

**DMG Scholarship [I0428]**

Established by DMG Landscape Architects, Burnaby, B.C. Application is not required.

**Donor(s):** DMG Landscape Architects  
**Qualification(s):** B.L.A. student who has completed semester 4 with a minimum 75% cumulative average and demonstrated outstanding ability in landscape design.  
**Amount:** 1 award of $650

**Donald L. Broadfoot Scholarship [I0994]**

This scholarship was created in honour of Donald Broadfoot who graduated from OAC in 1950. He worked for Hy-Line Poultry (a division of Pioneer Corn Company) in the US and Canada from 1950-1974 where he conducted disease and genetic research, and during that time did a lot of work which led up to effective treatments for various diseases in poultry. Apply by May 15 to the OAC Awards Committee (oaaward@uoguelph.ca) with a letter (no more than 2 pages) outlining your interest in poultry science. Please include relevant work experience; relevant volunteer experience and/or relevant research projects that demonstrate this interest. Please include the name of the award and the award ID number in the subject line of your email as well as on your application. Please include your student number on your application. Selection will be based on the strongest demonstrated interest measured by; work experience; volunteer experience and/or projects. Students may only receive this award once.

**Donor(s):** Doug Broadfoot  
**Qualification(s):** Students registered in any program in OAC who have completed a minimum of 10.0 credits at the time of application and who demonstrate an interest in poultry science.  
**Amount:** 1 award of $500

**Douglas M. Robinson Memorial Scholarship for Excellence in Communications [I0409]**

Established in memory of Douglas Robinson, OAC’53. Doug spent his career promoting and creating awareness of agriculture. This scholarship recognizes his leadership in agriculture communications and his service to both the University and agriculture communities. Apply with a resume to the OAC Awards Committee (oaaward@uoguelph.ca) by May 15. Selection will be based on demonstrated leadership promoting and creating awareness of agriculture through extracurricular activity including student competitions, university clubs, events and student government.

**Donor(s):** Mrs Marilyn Robinson Murray  
**Qualification(s):** Students registered in any degree program offered by the Ontario Agriculture College with a minimum of 10.0 credits.  
**Amount:** 1 award of $1,000

**Dr. James (Jim) Atkinson Scholarship [I1025]**

This award has been created through the generous contributions of many alumni and friends to recognize Dr. James (Jim) Atkinson’s influence at Guelph. As coach for over thirty years on both the men’s and women’s teams, as well as a respected faculty in the department of Animal and Poultry Science, Jim has had an impact on and off the field. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

**Donor(s):** Alumni and Friends of Dr. James (Jim) Atkinson  
**Qualification(s):** One male rugby player and one female rugby player who is registered in any undergraduate program and who has achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student enrolled in the Ontario Agricultural College.  
**Amount:** 2 awards of $1,000

**Dr. R. J. Hilton Memorial Scholarship [I0678]**

Established to honour the accomplishments of Dr. Hilton as the Chair, Horticulture Science, University of Guelph, first Director of the Arboretum and President/Chair of the Royal Botanical Gardens. Selection will be based on the highest cumulative average, demonstrated involvement in horticulture activities and involvement in academic club activities. Summer related work experience will also be considered. Preference will be given to students registered in B.Sc.(Agr.) CHATS and B.Sc. Plant Science. Apply by May 15 to the OAC Awards Office (oaaward@uoguelph.ca) with a letter outlining the plant agriculture course(s) and/or involvement in horticultural activities and summer related work experience or information about involvement in academic club activities. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** Robert E. Hilton  
**Qualification(s):** Students registered in any program offered by O.A.C. who have completed a minimum 8.0 credits with a minimum 70% cumulative average.  
**Amount:** 1 award of $1,000

**Dr. Ralph and Joanne Watt Scholarship [I1080]**

Apply to the OAC Awards Committee (oaaward@uoguelph.ca) by May 15 with a resume and a letter (no more than two page) outlining your career interests and your employment and/or extracurricular activities that demonstrate your interest in becoming an equine veterinarian and your involvement in agricultural activities. Please include the Award Name and ID in the subject line of your email and on all pieces of your application. Please also include your student ID on your application.

**Donor(s):** Sandy Watt  
**Qualification(s):** Students registered in the Bachelor of Science in Agriculture with a major in Animal Science, or Honours Agriculture; the Bachelor of Science with a major in Animal Biology; or the Bachelor of Bio-Resource Management with a major in Equine Management who have completed a minimum of 8.0 credits who aspire to become an equine veterinarian and who actively participate in agricultural activities.  
**Amount:** 1 award of $1,000

**Durante Kreuk Scholarship [I0675]**

Established by a Vancouver based firm with a broad range of experience in Landscape Architecture, Urban Open Space Design, and community design. Selection will be based on demonstrated high level of proficiency in design and implementation, with a focus on community design and demonstrated interest and potential to work in areas of community involvement and advocacy.

**Donor(s):** Durante Kreuk Ltd.  
**Qualification(s):** Students registered in the B.L.A. program who have completed a minimum of 14.0 credits and students in the M.L.A. program who are entering the 3rd semester.  
**Amount:** 1 award of $1,500
FORREC Scholarship in Landscape Architecture [I0941]
FORREC Ltd. provides this scholarship in support of a student who has exemplified innovation, collaboration and leadership in their design studio courses. Selection is based on highest cumulative average. Apply to the Landscape Architecture Undergraduate Awards Committee with a letter of 2 pages or less outlining your demonstrated innovation, collaboration and leadership in your design studio courses. Please be sure to include your name, student ID number, your program of study and the award you’re applying to on your application. Please email your application to oacaward@uoguelph.ca and include the award name and ID number in the subject line.

Donor(s): FORREC
Qualification(s): Students registered in the Bachelor of Landscape Architecture program who have completed at least 14.0 credits with a minimum 75% cumulative average and who have exhibited innovation, collaboration and leadership in their design studio classes.
Amount: 1 award of $2,000

Garden Club of Toronto Scholarship [I0109]
Apply with a one-page summary indicating a strong interest in ornamental plant materials to the School of Landscape Architecture by May 15.

Donor(s): The Garden Club of Toronto
Qualification(s): Student who has completed semester 6 of the program in Landscape Architecture. The recipient will have high academic standing and exhibit a strong interest in ornamental plant materials.
Amount: 1 award of $1,000

George A. Gray O.A.C. ’51 Varsity Scholarships [I0487]
Established in memory of George Gray, O.A.C. ’51, a Guelph football lineman and a great player of the game. Recipients will be selected based on demonstrated athletic and leadership qualities. Coaches will nominate students to the Athletics Awards Committee. Preference will be given to members of the varsity football team. Application is not required. Awarded in the fall semester.

Donor(s): Mrs. George A. Gray
Qualification(s): In-course student-athlete who is a current member of a varsity team and has achieved a minimum 70% average in the previous academic year.
Amount: 2 awards of $1,250

Glenn Webb Education Scholarship/ GROWMARK Foundation OAC - Guelph Campus [I0897]
Apply by May 15 to the OAC Awards Office with a letter of no more than two pages outlining leadership and involvement in extracurricular activities, community service or agricultural employment, farming background and career aspirations. Preference will be given to students with an Ontario farm background and are interested in pursuing full-time employment in agriculture in the province of Ontario after graduation. Selection will be made on leadership and involvement in the field of agriculture through extracurricular activities, part-time work, and/or volunteer work are eligible.

Donor(s): Growmark, Inc.
Qualification(s): Students with a minimum cumulative average of 70% who have completed 10.0 credits of any OAC degree program.
Amount: 2 awards of $1,000

Governor General’s Medal [C0044]
Established by the Office of the Governor General of Canada. Application is not required.

Donor(s): The Chancellery
Qualification(s): Restricted to those undergraduate students in any degree program who are graduating in June, or who have graduated in the previous two convocations, with the highest cumulative average.
Amount: 2 awards of a Silver medal each

Harry Barrett Memorial Scholarship [I1046]
This award was established through a gift from the estate of Mr. Harry Barrett, a graduate of OAC from 1949. Selection will be based on the highest cumulative average. Apply by May 15th to Student Finance with a written explanation of the planned experiential learning opportunity. If there are no applications by May 15th, the scholarship will be given to the student with the highest grade in ZOO*4920 in the previous Fall offering.

Donor(s): The Estate of Harry Barrett
Qualification(s): Students registered in any program who will be participating in field work related to bird studies. Preference will be given to students interested in research and/or study under the Bird Studies Canada program at their headquarters in Port Rowan, Ontario.
Amount: 1 award of $1,500

Helen Kippax Memorial Scholarship [I0657]
Selection will be based on level and quality of participation in community service and involvement in professional activities. Preference will be given to a female student. Apply by May 15 to the OAC Awards Office with a letter outlining community service and professional activities.

Donor(s): Ruth Kippax Stedman Estate
Qualification(s): Students registered in the BLA or MLA program with a minimum 75% cumulative average and active in community service as well as involved in professional activities.
Amount: 1 award of $1,000

Howard B. Dunington-Grubb Scholarships [I0092]
Offered by the Sheridan Nurseries. Application is not required.

Donor(s): J. Vilhelm Stensson, Sheridan Nurseries Limited
Qualification(s): Students who have completed semester 6 in the Landscape Architecture program. Students with a minimum of 70% standing and outstanding design ability are eligible.
Amount: 1 award of $1,000

International Undergraduate Scholarship [I0577]
Established through a student referendum approved by the undergraduate student body, to recognize international students’ academic merit along with involvement/leadership activities during their enrollment at the University of Guelph. Apply to Student Financial Services, by May 15, with a letter indicating involvement/extracurricular activity since entry to the University. This award can only be held once by the student.

Donor(s): International Student Organization (ISO)
Qualification(s): Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.
Amount: several at awards of $3,000

Jack and Lillian MacDonald Scholarship [E0379]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

Donor(s): Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald
Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).
Amount: 1 award of $900

John Burton Scholarship [I0642]
Established by Dr. John Burton, BSA 1962, a former faculty member in the Department of Animal Biosciences. Selection will be based on involvement with and contribution to the horse industry, future career aspirations in the horse industry sector and participation in community activities. Preference will be given to student who have demonstrated leadership ability within the student body. Apply by May 15 to the OAC Awards Office with a letter, of no more than two-pages, outlining involvement with and contributions to the horse industry, career aspirations, and extracurricular involvements. Awarded in the fall semester.

Donor(s): Dr. John Burton
Qualification(s): Students registered in any program offered by the OAC who have completed between 10.0 and 12.0 credits with a minimum 70% average
Amount: 1 award of $1,000

John Eccles Scholarship [I0093]
Apply to Student Financial Services, by May 15, with a letter highlighting leadership abilities through participation on residence life. Providing a reference letter would be an asset.

Donor(s): Student Housing Services
Qualification(s): Full-time student registered in semester 2, 3, 4, 5 or 6 and living in residence in the Winter semester who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in residence related activities. Residence Life Staff and paid members of Interhall Council and Hall Councils are not eligible.
Amount: 1 award of $1,000
Kenneth W. Hammond Scholarship [I0045]

Student with the highest grade in the course ENVS*2070 “Environmental Perspectives and Human Choices.” Application is not required.

**Donor(s):** Kenneth W. Hammond  
**Qualification(s):** Students who have completed the course Environmental Perspectives and Human Choices ENVS*2070  
**Amount:** 1 award of $1,000

Kevin Durie Memorial Scholarship [I0653]

Established in memory of Kevin Durie, BA ’93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.

**Donor(s):** Christine Blake-Durie  
**Qualification(s):** Students who are registered in any degree program on the University of Guelph campus, are a member of Residence Life staff and are academically eligible to continue as a Residence Assistant or as part of Residence Life staff.  
**Amount:** 2 awards of $1,000

Kip Hunter Prize [I0139]

For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May 1

**Donor(s):** Faculty, students and staff of the Philosophy Department  
**Qualification(s):** Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.  
**Amount:** 1 Book prize

Lambda Foundation Scholarship in LBGT Studies [I0591]

This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LBGT peoples. Preference will be given to an applicant who is involved in the LBGT community as demonstrated by a record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a given student only once. Projects must have been completed or research proposals accepted within the past calendar year. Apply to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referencing involvement in the LBGT community and/or faculty support.

**Donor(s):** Lambda Foundation and other donors  
**Qualification(s):** Students enrolled in a program with a thesis, a research essay, independent research project or course work programs pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.  
**Amount:** 1 award of $1,000

Land Art Design Landscape Architecture Inc. Scholarship [I1081]

Generously supported by Jacqueline VanderVelve, this scholarship supports students registered in the Bachelor of Landscape Architecture.

**Donor(s):** Jacqueline VanderVelve  
**Qualification(s):** Students registered in the Bachelor of Landscape Architecture who have completed 14.0 credits, have taken an internship and have a minimum cumulative average of 75% and who have demonstrated an interest in urban design focused on creating communities where social interaction is encouraged as evidenced by studio projects and/or extracurricular activities. Selection will be nominated by the school of BLA, based on the strongest interest in urban design that is focused on creating communities where social interaction, evidenced by design studio projects and/or extracurricular activities. In the event of a tie, the student with the highest cumulative average will be selected.  
**Amount:** 1 award of $1,500

Landscape Architecture Alumni Scholarships [I0329]

Provided by the Alumni of the School of Landscape Architecture, Students, faculty or alumni may nominate eligible students to the School of Environmental Design and Rural Development by October 30.

**Donor(s):** Landscape Architecture Alumni  
**Qualification(s):** Students enrolled in the B.L.A. program who have just completed either semester 2 or 6. The recipient(s) will be selected on the basis of academic performance and participation in extracurricular activities.  
**Amount:** 1 award of $1,000

Leonard Conolly Exchange Student Scholarship [I0446]

Established by students, faculty, staff and friends to honour Prof. Leonard Conolly, professor of drama, Chair of the Department of Drama, 1981-88, and Associate Vice-President Academic, 1988-1992. Apply to the Centre for International Programs by April 5, for visiting during the subsequent Fall or Winter semesters. Selection, by the Centre for International Programs, will be based on assessment of (a) a one-page submission describing the significance of the student visiting Guelph to the program of study at the partner exchange university; (b) two faculty references of one-page each; and (c) consistent high performance in the course work completed, as documented by a transcript of grades to date, submitted by the home university.

**Donor(s):** Students, staff, faculty and friends of Dr. Leonard Conolly  
**Qualification(s):** Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).  
**Amount:** 1 award of $1,000

Linda S. Allen Memorial Graduation Prize [C0914]

This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medallion, on the occasion of its second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant circumstances during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).

**Donor(s):** Brian Allen, Family, Friends and Colleagues of Linda S. Allen  
**Qualification(s):** Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.  
**Amount:** 1 award of $1,000

Nathan Max Goldman Choir Scholarships [I0774]

Established in honour of Mr. Goldman, an OAC graduate (1945 and 1947) and former President of the Philharmonia Society at the University of Guelph. The scholarships will support two students who demonstrate outstanding leadership and vision in the Symphonic Choir and/or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high vocal achievement and choral leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required as a recommendation by Choir Director will be made to the SOFAM Awards Committee.

**Donor(s):** Mrs. Anne Goldman and the family of Nathan Max Goldman  
**Qualification(s):** Students registered in any degree program who are currently a member of the University of Guelph Symphonic Choir and/or the Chamber Choir and have been a member of the University of Guelph Choirs for at least two years.  
**Amount:** 2 awards of $1,000
### Nick Westwood Memorial Scholarship in Spectroscopy [10982]
In recognition of Professor Nick Westwood’s enduring contributions to the field of Molecular Spectroscopy, and his devotion to academic development and achievement at all levels, his family, friends and Department of Chemistry colleagues have established this award to honour his memory. Selection will be based on the highest grade in CHEM*2070 Structure and Spectroscopy. In the event of a tie, the award will go to the student with the highest cumulative average. Application not required.

**Donor(s):** Staff, faculty and friends of the Department of Chemistry  
**Qualification(s):** Students registered in any degree program with a minimum 80% cumulative average who have obtained a minimum of 80% in CHEM*2070 Structure and Spectroscopy.  
**Amount:** 1 award of $1,000

### O.A.C. ’55 Scholarships [10604]
Provided by the class of O.A.C. ’55. Recipients will have made an outstanding contribution to College life through academic proficiency and participation in extracurricular activities and can be considered to have done the most for the College, for fellow students and in their personal development. Apply by May 15 to the OAC Dean’s Office (Awards) with a letter outlining your participation in Class/College/University activities. Awarded in the fall semester.

**Donor(s):** O.A.C. ’55  
**Qualification(s):** Students registered in any O.A.C. degree program or students registered in the B.ENG. program that have completed a minimum of 10.0 with at least a 70% cumulative average.  
**Amount:** 1 award of $1,500

### O.A.C. Centennial Graduate Prizes [C0209]
The Ontario Agricultural College celebrated its 100th Anniversary in 1974. Many organizations and companies associated with the agricultural industry provided funds in conjunction with the Centennial activities. Funds have been established in perpetuity as a permanent commemoration of the Centennial of the College. Apply to OAC Awards Office by April 1 with a letter outlining extracurricular activities. Selection will be based on academic achievement in semesters 7 and 8, as well as participation in extracurricular activities throughout the student's university career.

**Donor(s):** Dean, O.A.C.  
**Qualification(s):** Students graduating from a degree program administered by the Ontario Agricultural College and who plan to pursue graduate studies in any department or school of the Ontario Agricultural College in the year of baccalaureate graduation. The fellowship will be based on academic achievement in semesters 7 and 8, as well as participation in extracurricular activities throughout the student's university career.  
**Amount:** 1 award of $2,200

### O.A.C. Students' Federation Medal [C0217]
Application is not required.

**Donor(s):** O.A.C.  
**Qualification(s):** Graduating student in an undergraduate degree program in a major in an O.A.C. department who has been an outstanding leader in student activities at the College level throughout his or her University career.  
**Amount:** 1 award of a Medal

### OAC “BLA Class of ’82” Peer Mentor Scholarship [10698]
Established to recognize and promote mentoring and leadership of students in Landscape Architecture. Preference will be given to students who have mentored other students in LARC*2020 Design Studio. No application is necessary.

**Donor(s):** OAC “BLA Class of ’82”  
**Qualification(s):** Students registered in the Bachelor of Landscape Architecture program who have completed at least 5.0 credits with a minimum 70% cumulative average and who have exhibited leadership abilities in the area of counseling, sponsoring and acting as a role model to others in the program (being a mentor).  
**Amount:** 1 award of $1,000

### OAC45 Public Speaking Scholarship [10200]
Offered by the Class of ’45 O.A.C., on the occasion of their 40th anniversary. Apply with a one page letter summarizing public speaking experience to the OAC Awards Office by May 15. Selection will be based on demonstrated excellence and effort in public speaking within or outside of the University of Guelph (i.e. TEDx, Toastmasters, 4-H, community events).

**Donor(s):** Mr. Aubrey Hagar  
**Qualification(s):** Students who have completed a minimum of 15.0 credits in any program offered by OAC.  
**Amount:** 1 award of $1,500

### Ontario Association of Landscape Architects Scholarship [10219]
Selection will be made on academic achievement, performance in design studio and leadership qualities. Application is not required.

**Donor(s):** The Ontario Association of Landscape Architects  
**Qualification(s):** Student who has completed semester 5 of the B.L.A. program.  
**Amount:** 2 awards of $1,000

### Parrish and Heimbecker Scholarship (formerly known as Heimbecker Scholarship in Entrepreneurship) [10388]
Parrish and Heimbecker, Limited is a private, family owned business, founded in 1909 involved in many aspects of agri-business across Canada. This scholarship was established to honour Herb Heimbecker’s service and contribution to the agri-food industry in Canada. Apply by May 15 to the OAC Awards Committee at oacaward@uoguelph.ca with a resume demonstrating the students’ level of involvement with the agricultural and food industry. Please include the name of the award and the Award ID number in the subject line of your email and on your application. Please also include your student ID number on your application. Selection will be based on demonstrated commitment to the agricultural and food industry measured by the approximate number of hours a student has dedicated per week to work and/or extracurricular and/or volunteer activities related to the agricultural and food industry during their Undergraduate degree.

**Donor(s):** Friends and Associates of Herb Heimbecker  
**Qualification(s):** Students registered in any OAC program, whom have completed a minimum of 10 credits who have demonstrated their passion and commitment to the agricultural and food industry through their extracurricular and/or volunteer activities during their Undergraduate degree and who aspire to have a career in the agricultural and food industry.  
**Amount:** 1 award of $1,000

### Priscilla and Stanford Reid Trust Prize [10597]
Established in honour the first chair of the History Department, Stanford Reid, and his wife, Priscilla Reid to acknowledge the best paper written about the history of Presbyterianism and/or the Reformed tradition. Apply by April 1, with a copy of the paper and a covering letter including contact information to the Department of History Awards Chair.

**Donor(s):** Priscilla and Stanford Reid Trust Fund  
**Qualification(s):** Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.  
**Amount:** 1 award of $500

### Professional Staff Association Future Leader Scholarship [11132]
This scholarship is provided to students whose leadership involvement makes a positive impact at the University of Guelph and/or the broader community. Apply by email to awards@uoguelph.ca by May 15 with one letter of reference and a personal statement (max 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average would be awarded. This award may not be held more than once.

**Donor(s):** The Professional Staff Association (PSA)  
**Qualification(s):** Students registered in any program who demonstrate involvement in leadership opportunities that result in positive community impact, and who are from the immediate family of full-time, part-time, contractual or retired members of the Professional/Managerial Group at the University of Guelph. Preference will be given to a student that has not received the Professional Staff Association Scholarship in the same year.  
**Amount:** 1 award of $1,500
IX. Scholarships and Other Awards, Bachelor of Landscape Architecture

Professional Staff Association Scholarship [I0628]

This scholarship is provided to students with the highest cumulative average. Apply to Student Financial Services by May 15 by sending an email to awards@uoguelph.ca and include the name of the family member of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. This award may be held more than once, however, not in consecutive years. Preference will be given to students of current or retired P.S.A. members. Selection will be based on highest cumulative average.

**Donor(s):** Professional Staff Association  
**Qualification(s):** Full-time students who are from the immediate family, part-time or contractual Professional/Managerial Group employees of the University, and/or retired Professional/Managerial Group of the University of Guelph who have completed at least 5.0 credits and have a minimum 70% cumulative average.  
**Amount:** 1 award of $1,500

Project Hero Scholarship [I0979]

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph  
**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.  
**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

RB Palmer Horticultural Scholarship [I1083]

These scholarships were established by RB Palmer in support of students who are interested in plant breeding, plant genetics and horticulture. RB Palmer was particularly inspired by Ornamental Horticulture, lilies and gladiolas in particular. Apply by May 15 to the OAC Awards Office (oaacademic@uoguelph.ca) with a letter (no more than two pages) listing the courses you have completed that demonstrate your interest in horticulture, plant genetics or plant breeding. Selection will be based on highest cumulative average.

**Donor(s):** RB Palmer Horticultural Fund  
**Qualification(s):** Students registered in a program offered by the Ontario Agricultural College who demonstrate an interest in horticulture, plant genetics or plant breeding. Preference will be given to students who demonstrate an interest in Ornamental Horticulture.  
**Amount:** 1 award of $1,000

Scotiabank Scholarships in Leadership [I0834]

Apply to the Department of Management Awards Committee by May 15 with: 1) A 500 word personal statement describing the impact of their leadership practice in a non-profit setting including the benefits both to the student and to the organization; 2) Reference letter(s) from the organization(s) in which the leadership practice took place. In the event of a tie, the award will go to the student with the highest cumulative average. Please submit your application by email to: dom.awards@uoguelph.ca.

**Donor(s):** Scotiabank  
**Qualification(s):** Students who have completed the Foundations of Leadership course (HROB*2010) and either completed the required 120 hours of leadership practice for the undergraduate Certificate in Leadership in a non-profit setting or are registered in the Leadership and Organizational Management major of the BComm program and have demonstrated exceptional leadership in a non-profit setting.  
**Amount:** 5 awards of $1,000

Sports Media and Sports Broadcasting Scholarships [I1035]

Apply by May 15th to Student Financial Services by submitting a one page letter outlining sports media or sports broadcasting experience in the past year. Letters can be emailed to awards@uoguelph.ca. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minoring in Media and Cinema Studies and who have the highest GPA.

**Donor(s):** Rogers Media Inc.  
**Qualification(s):** Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas. To be awarded to an undergraduate student first, then to a graduate student if no undergraduate students apply.  
**Amount:** 2 awards of $2,500

Stantec Landscape Architectural Scholarship [I0621]

Established by Stantec Consulting Ltd., a major employer of numerous professional consulting disciplines. Selection will be based on a high level of well-rounded proficiency in design, construction and professional practice knowledge based on recent course work. Application is not required.

**Donor(s):** Stantec Consulting Ltd.  
**Qualification(s):** Students enrolled in the Bachelor of Landscape Architecture program who have completed 14 credits.  
**Amount:** 1 award of $1,250

Stephanie Wilken Volunteer Scholarship [I0449]

Established by the Wilken family in memory of Stephanie Wilken, BA 1995. Apply to Student Financial Services with letter indicating the kind and extent of volunteer activities at the Wellness Centre by October 1. Selection committee is the Senate Committee on Awards. Selection is based on highest cumulative average. Application is not required.

**Donor(s):** Bev and Darlene Wilken  
**Qualification(s):** Student registered in any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre.  
**Amount:** 1 award of $1,000
Summerlee Humanitarian Scholarships [10964]
The Summerlee Humanitarian Scholarships are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues of global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a varsity athlete (varsity athletes should self-identify in their letter). While applicants who demonstrate past significant impacts in improving local communities/groups will be considered, preference will be given to applicants with strong previous proven international humanitarian efforts. Recipients must adhere to the University of Guelph’s Safe Travel Policy.

Donor(s): The Angel Gabriel Foundation

Qualification(s): Students registered in any program with no more than 17.0 credits completed who have demonstrated a commitment to humanitarian efforts including but not limited to those affecting refugees, displaced persons, and populations affected by conflict and natural disasters through volunteer positions, prior employment and/or extra-curricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.

Amount: 5 awards of $10,000 ($5,000 in each of the fall and winter semesters), plus an additional up to $4,000 to support travel costs

Susan Travers Memorial Scholarship [10975]
Established by friends, family and colleagues in Alumni Affairs and Development in Memory of Susan Travers. Susan believed in the value of education. She worked for the University of Guelph as a member of Alumni Affairs and Development and in the Department of Business. She not only encouraged her children to pursue post-secondary education, but led by example, pursuing her university degree as a mature student. Preference will be given to students registered in CSAHS and LANG. Selection will be based on highest cumulative average. No application required.

Donor(s): The staff in Alumni Affairs and Development and Friends

Qualification(s): Students who were accepted to the University of Guelph as a “mature student” applicant and who are currently registered in any degree program.

Amount: 1 award of $1,000

Thomas H. Peters Scholarship [10233]
Application is not required.

Donor(s): Friends and associates of Thomas H. Peters

Qualification(s): Student in any academic program of the University who has completed courses in Land Reclamation (e.g. CROP*2280, SOIL*3200), with a minimum 10.0 credits completed. Applicants must have a minimum of 70% cumulative average and have demonstrated an interest and aptitude in the area of crops and land reclamation.

Amount: 1 award of $500

Toronto District Beekeeper’s Association Scholarship [10285]
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application is not required.

Donor(s): Mr. Jack Robinson

Qualification(s): The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.

Amount: 1 award of $500

United Steelworkers Local 4120 Scholarship [10293]
Apply to Student Financial Services by January 31 and provide the name of the USWA member and relationship to the applicant. If there is more than one eligible candidate, the award will go to the one who has attained the highest relative class standing in his or her previous full-time semester.

Donor(s): United Steelworkers LU4120

Qualification(s): Student who is a member or former member, or who is from the immediate family of a member of United Steelworkers LU 4120, and who is entering semester 2, 3, or 4 of a degree or diploma program in the Winter semester with a minimum 70% cumulative average.

Amount: 1 award of $1,000

University of Guelph Alumni Legacy Scholarship [10735]
Funded through donations made to the University of Guelph Alumni Memorial Fund in memory of deceased alumni. The recipient will be selected based on academic achievement and volunteer contributions to the University of Guelph community. Apply to Student Financial Services by May 15 with a cover letter indicating name, degree and year of graduation of alumna/alumnus relative and a resume or summary of leadership and volunteer contributions to the University of Guelph community.

Donor(s): Various donors c/o University of Guelph Alumni Association Memorial Fund

Qualification(s): Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with both a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumna/us of the University of Guelph or its founding colleges.

Amount: 1 award of $1,000

University of Guelph Retirees Association Scholarship [10569]
Established in 2007 to acknowledge in-course student achievement. The student having the highest cumulative average will be selected and in the event of a tie, the student with the highest average in the last two semesters of full-time studies will be chosen. Apply by May 15th to Student Financial Services with a letter indicating name of and relationship to a retiree of the University of Guelph. Recipients cannot hold this scholarship and another scholarship greater than $1,500 at the same time.

Donor(s): University of Guelph Retirees Association (U.G.R.A.)

Qualification(s): Students with a minimum cumulative average of 75% registered in a degree program who are related to a retiree of the University of Guelph as child, grandchild or great grandchild who have not held the scholarship before.

Amount: 1 award of $1,500

Van Stralen and Van Der Hoeven Memorial Scholarship [10296]
The scholarship will be awarded to the student who has demonstrated academic achievement and exemplary leadership. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca a one-page summary demonstrating leadership skills gained through participation in extracurricular activities, both within the university and the broader community. Preference will be given to students who have completed between 3 and 10 credits at the time of application for the award.

Donor(s): Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoeven & family

Qualification(s): Students registered in any program who have achieved a minimum of 80% cumulative average and participated in extra-curricular activities.

Amount: 1 award of $2,000

Vera Bezeryed Memorial B.L.A. Design Scholarship [10480]
The scholarship has been provided in memory of the first female O.D.H. graduate, Vera Bezeryed. The recipient will be the student who has demonstrated an aptitude for community design. Application is not required.

Donor(s): O.D.H. Graduates Association

Qualification(s): Landscape Architecture students who have completed a minimum of 10.0 credits in the B.L.A. program and who have a minimum 75% cumulative average.

Amount: 1 award of $500

Victor Chanasyk Medal [C0265]
The decision will be based on the recommendation of the faculty in the School of Landscape Architecture. Application is not required.

Donor(s): Victor Chanasyk

Qualification(s): Graduating Bachelor of Landscape Architecture student who, in the view of the faculty, is deemed to be the most promising professional practitioner.

Amount: 1 award of a Medal

W.C. Winegard Medal [C0311]
The W.C. Winegard Medal is the most prestigious and top convocation award presented to an undergraduate student at the University of Guelph. Named for former University President Dr. William Winegard, the medal is awarded in recognition of both academic achievement and contributions to the university and community life. One student will be nominated by each College Awards Committee. The Senate Honours and Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application is not required.

Donor(s): The Board of Governors of the University

Qualification(s): Students who are graduating in June, or who have graduated in the previous two convocations who excels both academically and in contributions made to the university and community life.

Amount: 1 award of a Gold medal
W.N. Vaughan Medal [C0299]
A medal may be given annually to a student senator who has high academic standing and who has made a substantial contribution to student life and to the university, particularly through involvement in and commitment to Senate activities. Prospective candidates will be nominated by senators and the medal winner will be chosen by a committee selected by the Senate Bylaws and Membership Committee. The medal will be awarded at June convocation. No application is necessary.

Donor(s): Friends of Walter N. Vaughan
Qualification(s): Student senator who has high academic standing and who has made a substantial contribution to student life and to the University, particularly through involvement in and commitment to Senate activities.

Amount: 1 award of a Medal

Warren Stein Memorial Scholarship [I0955]
Apply by May 15th to the OAC awards committee (oacaward@uoguelph.ca) with a letter (maximum 2 pages) outlining your studies related to swine. Please include the name of the award and the award ID number in the subject line of your email and on your letter. Selection will be based on the highest cumulative average.

Donor(s): Canadian Swine Breeders Association

Qualification(s): Students registered in any program offered by OAC who have completed 10.0 credits or more and who are engaged in swine related studies.

Amount: 1 award of $2,000

In-course Scholarships with Financial Need

Brian Kenneth Howard Memorial Scholarship [I4548]
Established by Kenneth and Irene Howard in memory of their son, Brian Kenneth Howard. Awarded to a student assessed as having financial need with a preference given to students from York, Durham or Simcoe counties. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Kenneth and Irene Howard with matching funding through the Ontario Trust for Student Support program

Qualification(s): Student registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $3,000

City of Guelph 175th Anniversary Scholarship [I0515]
Funded by a leadership gift from the City of Guelph and donations from business and community leaders, this scholarship was established in 2002. Apply to Student Financial Services by October 7 with a letter describing volunteer activities, one reference letter from an individual familiar with the volunteer and/or community service contributions, and a completed Financial Need Assessment Form (N.A.F.). Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need. This award may be held only once.

Donor(s): The Guelph Community Foundation

Qualification(s): Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70.0% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.

Amount: 1 award of $2,000

Dr. Kenneth & Nancy Lawless [I4552]
Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Dr. Kenneth W. Lawless with matching funding through the Ontario Trust for Student Support program

Qualification(s): Student registered in any program offered by the Ontario Agricultural College who has completed at least 5 credits with a minimum cumulative average of 75% and has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $2,700

Eleanor Morgan & Bill Archibald Scholarships [I4540]
The family of Eleanor and Bill Archibald, with the assistance of the Ontario government’s OSOTF program, provide this scholarship in memory of their parents. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining community involvement to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): The Family of Eleanor & Bill Archibald with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students registered in any program with a minimum of 5.0 credits who have cumulative 70% average, has demonstrated community involvement, and financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $2,500

Erin Demers Memorial Scholarship [I0406]
The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.), along with one supporting reference letter from a Residence Assistant, Residence Manager, or Residence Officer.

Donor(s): Family and friends of Erin Katrina Demers

Qualification(s): Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

Amount: 1 award of $1,800

Euclid-Hitachi Scholarships [I4517]
Established by Euclid-Hitachi of Canada Ltd., with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD

Donor(s): Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,500

Graham Family Incentive Scholarship [I4506]
Provided by Harvey Graham (O.A.C.’39) with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD

Donor(s): Harvey Graham O.A.C.’39 with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students entering the fourth year of a four year degree program, maintaining at least a 70% program average and demonstrating financial need, who have previously received the Harvey Graham Bursary. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $6,000

Guelph Campus Co-operative Centennial Scholarship [I0867]
In recognition of the Guelph Campus Co-operative’s centennial anniversary and the students who founded it, this scholarship is awarded to a student who has demonstrated financial need. Preference will be given to students who are members of the Guelph Campus Co-operative. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form and a photocopy of your valid co-operative membership card.

Donor(s): Guelph Campus Co-operative

Qualification(s): Students registered in any program at the University of Guelph who have completed a minimum of 5.0 credits with a minimum cumulative average of 75% and have demonstrated financial need.

Amount: 1 award of $1,000
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nora Spence Memorial Scholarship [14394]</td>
<td>This scholarship was created by George and Jane Spence in memory of their daughter Nora Spence, O.A.C. BSc ’06 with the aid of the Ontario government’s OTSS program. Selection will be based on high academic achievement. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td>Donor(s):</td>
<td>Jane and George Spence with matching funding through the Ontario Trust Fund for Student Support program</td>
</tr>
<tr>
<td>Qualification(s):</td>
<td>BSC students registered in a major offered by O.A.C. who have a minimum cumulative average of 75% and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $1,750</td>
</tr>
</tbody>
</table>

| R. Douglas and Kathleen Kennedy Scholarship in O.A.C. [10547] | Douglas O.A.C. ’39 and Kathleen (MAC ’39) Kennedy met at a “hop” on campus in 1937 and later married. They established this scholarship to celebrate their time on campus and their 62 years of marriage. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. |
| Donor(s):                                                | Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy |
| Qualification(s):                                       | This scholarship will be awarded to a student in O.A.C. with high academic achievement and demonstrated financial need. |
| Amount:                                                 | 1 award of $1,200                                                                         |

| Residence Life Staff Scholarship [10697]                | Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. |
| Donor(s):                                               | Student Housing Services |
| Qualification(s):                                       | Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program. |
| Amount:                                                 | 2 awards of $500                                                                         |

| Returning Student Residence Scholarship [10696]         | Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must have resided in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award. |
| Donor(s):                                               | Student Housing Services |
| Qualification(s):                                       | Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average. |
| Amount:                                                 | 3 awards of $500                                                                         |

| Robert, Louis and Helen Shaw Memorial Degree Scholarships [14520] | Established by the Shaw Scholarship Committee with the assistance of the Ontario government's OSOTF program. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD. |
| Donor(s):                                                   | The Shaw Scholarship Committee with matching funding through the Ontario Student Opportunities Trust Fund |
| Qualification(s):                                          | Students registered in the BSc(Agr), BLA, BSc with a major in Plant Agriculture or BBRM.EQPM programs with demonstrated financial need, and a 70% cumulative average Preference will be given first to first year students from Peterborough County and then to students from Peterborough County. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). |
| Amount:                                                    | Several awards of varying amounts                                                        |

| Tara Lynn Giuliani Memorial Scholarship [10375]           | Funded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form. Selection is based on financial need. |
| Donor(s):                                                 | Tara Lynn Giuliani Foundation at the Hamilton Community Foundation |
| Qualification(s):                                        | Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services and who have demonstrated financial need. Preference given to students with a visual impairment. |
| Amount:                                                   | 1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000 |

| William & Nona Haslup Scholarship [10589]                | Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7. Recipients of this award can have this award renewed for up to 3 years provided they continue to demonstrate financial need and maintain a minimum 70% cumulative average of full-time (minimum 80% of a full course load) study. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. |
| Donor(s):                                                | The William and Nona Haslup Foundation |
| Qualification(s):                                        | Students that have completed 4.0 credits but no more than 6.0 credits in any degree program; are a Canadian citizen/permanent resident; have a minimum 70% cumulative average; and demonstrate financial need. |
| Amount:                                                  | 2 awards of $15,000                                                                      |

<table>
<thead>
<tr>
<th>In-course Bursaries</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer Saccharum Bursary [13083]</td>
<td>Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and confirmation of registration with Student Accessibility Services.</td>
</tr>
<tr>
<td>Donor(s):</td>
<td>Steven Ardron and Celine Batterink</td>
</tr>
<tr>
<td>Qualification(s):</td>
<td>Students registered in any degree program at the University of Guelph, who have demonstrated financial need and are registered with Student Accessibility Services.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

| Brinson Partners Inc. Bursaries [13526]                  | Brinson Partners Inc., with the assistance of the Ontario government's OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD. |
| Donor(s):                                                | Brinson Partners Inc. with matching funding through the Ontario Student Opportunities Trust Fund |
| Qualification(s):                                       | Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). |
| Amount:                                                  | 2 awards of $1,500                                                                         |

| Burnbrae Farms Bursaries [13525]                         | Established by Burnbrae Farms, with the assistance of the Ontario government's OSOTF program to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement explaining interests in poultry science to Student Financial Services by October 7. ACCESS AWARD. |
| Donor(s):                                                | Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund |
| Qualification(s):                                       | Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). |
| Amount:                                                  | 2 awards of $1,000                                                                         |

| Campbell-Ouellette Family Bursary [13998]                | Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family's broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. |
| Donor(s):                                                | Dr. Malcolm Campbell |
| Qualification(s):                                       | Students registered in any program with demonstrated financial need. |
| Amount:                                                  | 1 award of $2,000                                                                         |
Class of ‘72: 25th Reunion Bursaries [13512]

Established by the Class of ‘72: 25th Reunion Fund with the assistance of the Ontario government’s OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Class of ‘72: 25th Reunion Student Opportunities Trust Fund

Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 3 awards of $1,000

Class of O.A.C. ‘33 Bursaries [13531]

Established by the class of O.A.C. ‘33 on the occasion of their 65th Anniversary, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Class of 1933 (in honour of the late Prof. W.I.L. Squirrell) with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

David Havoic Bursary [13087]

Established by the Havoic family, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to the student with the greatest financial need. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and attach a letter from Student Accessibility Services confirming registration and physical disability.

Donor(s): Debbie and David Havoic

Qualification(s): Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.

Amount: 1 award of $1,000

David R. Leach Memorial Bursary [13534]

Provided in memory of David R. Leach by his family, with the assistance of the Ontario government's OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. 73 and graduated with a B.Sc. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7. ACCESS AWARD.

Donor(s): Mrs Deborah Leach-Sartor with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students who are physically disabled as determined by the Student Accessibility Services with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $1,000

Denis and Patricia Yates Bursary [13097]

Established by Charlotte Yates in memory of her parents who were strong advocates for the value of education in society. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): Dr. Malcolm Campbell

Qualification(s): Students registered in any program with demonstrated financial need.

Amount: 1 award of $2,000

Donald P. Watson Bursaries in Horticultural Science [14501]

Established by the estate of Donald P. Watson, O.A.C. ’34, with the assistance of the Ontario government’s OSOTF program. Preference will be given to students in BLA and the CHATS major in the BSc(Agr) degree program. Apply to Student Financial Services by October 7 and include a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): The estate of Dr. Donald P. Watson with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students registered in BLA program, the BSc(Env) program, the Agriculture, CHATS, Organic Agriculture majors of the BSc(Agr) program, or the Plant Science major of the BSc program who have completed a minimum of 10.0 credits and who have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

Dr. Gordon Macleod Memorial Bursary [13093]

Established in memory of Dr. Gordon Macleod and in dedication to his interest in the dairy industry. Apply to Student Financial Services (awards@uoguelph.ca) with a completed Financial Need Assessment Form (N.A.F.) and a letter reflecting on your interest in dairy related studies by October 7. Please be sure to include your name, student ID number, your program of study and the award you are applying to on your letter and application. Please email your application to awards@uoguelph.ca and include the award name and ID number in the subject line.

Donor(s): Cynthia Macleod

Qualification(s): Students registered in any degree program offered by OAC, who have financial need and who can demonstrate an interest in dairy related studies.

Amount: 1 award of $3,000

Elizabeth Burton Bursaries [13503]

Mrs. Elizabeth Burton, with the assistance of the Ontario government's OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

F. Elsie M. Brown and William R. Brown Bursary [13091]

Supported by a gift from the Estate of Fredelene Elsie May Brown and her predeceased husband, William Robert Brown. Apply to Student Financial Services by Oct 7 with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): Estate of Fredelene Elsie May Brown

Qualification(s): Students registered in any program offered by the OAC who have completed at least 10.0 credits and demonstrate financial need.

Amount: 2 awards of $2,500

Flower Deco Bursary [13095]

Apply by October 7 with a completed Financial Need Assessment Form to Student Financial Services and a letter explaining your interest in horticulture. In your letter, please include a list of the courses you have taken at U of G that demonstrate your interest in horticulture. Selection will be based on financial need.

Donor(s): Mr. Young-Hoon Song

Qualification(s): Students registered in any of the following programs are eligible for this award: Bachelor of Science in Agriculture with a major in Crop, Horticulture and Turfgrass Sciences or Bachelor of Science in Agriculture with a major in Honours Agriculture, or Bachelor of Science with a major in Plant Science or Bachelor of Landscape Architecture. Preference will be given to students with an interest in Horticulture.

Amount: 1 award of $2,000
Gryphon Investment Council Bursaries [13513]
Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**ACCESS AWARD**

**Donor(s):** Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

Guelph Compassionate Health and Dental Bursary [13061]
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph’s mandatory Student Health Plan, University of Guelph's Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment form; (2) a letter from physician or dentist outlining the treatment plan and insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan. Applications will be reviewed throughout the semester to handle unforeseen health and dental emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

**Donor(s):** Student Health and Dental Plan Reserve

**Qualification(s):** Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student’s academic progress.

**Amount:** Several awards of various amounts to a maximum of $1,500

Guelph Student Assistance ACCESS Bursaries [13556]
These bursaries have been established and approved by undergraduate students through student referendum with the aid of the Ontario government's OTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**ACCESS AWARD**

**Donor(s):** Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** Several awards of varying amounts up to $1,000

Guelph Student Assistance Program [13056]
These bursaries have been established and approved by undergraduate students through student referendum to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** Undergraduate Students

**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need.

**Amount:** Several awards of varying amounts up to $1,000

Gwen Karr Memorial Bursary [13010]
Mr. T.K.C. Karr, O.A.C. ’32, has provided an endowment fund to assist students in a degree or diploma program of the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** Mr. T.K.C. Karr, O.A.C. ’32

**Qualification(s):** O.A.C. students with demonstrated financial need.

**Amount:** Several awards of various amounts

Helen Mahon Memorial Bursary [13063]
Established in memory of Helen Mahon, a longtime employee of the University of Guelph and who, following the death of her husband, raised three young children alone, all of whom graduated from university. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a statement that indicates you meet the criteria of this bursary. Awarded in the winter.

**Donor(s):** Family and Friends of Helen Mahon

**Qualification(s):** Students registered in any program who come from a family where one parent is deceased.

**Amount:** 1 award of $500

Howard and Myrtle Rogers Bursaries [13537]
Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**ACCESS AWARD**

**Donor(s):** The Estate of Howard and Myrtle Rogers with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate on-going financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 10 up to $2,000

Indigenous Student Bursary [13068]
In 2009, the Ministry of Advanced Education and Skills Development established the this Bursary as part of their new Aboriginal post-secondary education funding initiative. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with financing their education. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and complete the Indigenous Student Bursary application. Selection is based on financial need.

**Donor(s):** Ministry of Advanced Education and Skills Development (MAESD)

**Qualification(s):** Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP) and have demonstrated financial need.

**Amount:** several awards ranging in values from $1,000 to $3,500

International Emergency Medical Aid Assistance [13059]
The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an on-going basis.

**Donor(s):** University of Guelph

**Qualification(s):** International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.

**Amount:** Several awards of varying amounts
IX. Scholarships and Other Awards, Bachelor of Landscape Architecture

Irvine and Grace Black Memorial Bursary [I3051]
Established in memory of Irvine and Grace Black, by friends and family to recognize their many contributions to young people. Irvine, a well-known sheep breeder, was a judge at College Royal and the Royal Winter Fair for over fifty years, and Grace was active in the Women’s Institute and the Fergus Fall Fair. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining involvement in the 4-H Club and/or a Women’s Institute by October 7.

Donor(s): Family and friends of Irvine and Grace Black
Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to applicants who, or have been, active in the 4-H Club and/or a Women’s Institute.

Amount: 1 award of $500

Ivey Cook Bursaries [I3076]
Apply to SAS using the "New Student Intake Form" and a letter explaining your situation and attach documentation showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first come first served basis, based on the validity and need for an assessment.

Donor(s): Suzanne Ivey Cook
Qualification(s): Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment.

Amount: several awards of up to $1,000

Landscape Architecture ACCESS Bursaries [I4531]
Established by faculty and students in Landscape Architecture, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Faculty members and students in Landscape Architecture with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in the School of Landscape Architecture with demonstrated financial need and a minimum B average in the previous academic year. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $500

Madison Gough Memorial Bursary [I3103]
Established by the friends and family of Madison Gough, a gentle, kind spirit who was inspired by nature, animals, or music and passionate about acceptance of difference. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Bob Gough and Laura Ladouceur
Qualification(s): Students registered in any program who have demonstrated financial need.

Amount: 1 award of $1,000

Mary I. Whitelock Bursaries [I3254]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Estate of Mary I. Whitelock with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 13 awards of $2,000

Métis Nation of Ontario Bursaries [I3092]
The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and a statement confirming Métis status and include your card number.

Donor(s): Métis Nation of Ontario
Qualification(s): Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.

Amount: 1 award of $1,000

Murray P. And Florence L. Hannah Bursaries [I3571]
Preference will be given to students from the County of Northumberland. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Estate of Florence Hannah with matching funding through the Ontario Trust for Student Support program
Qualification(s): OAC students registered in the BSc(Agr) or the BSc(Env) program who have completed a minimum of 4.0 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: several awards of varying amounts

Norma Valeriote International Student Bursaries [I3009]
Preference given to a student from a country of focus as defined by CID to International Development Agency. Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.

Donor(s): Mrs. Norma L. Valeriote
Qualification(s): International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.

Amount: Several of varying amounts

O.A.C. ’38 Lloyd Minshall Bursaries [I3529]
Established by O.A.C. ’38 Alumni, with the assistance of the Ontario government’s OSOTF program, to recognize the many contributions of Lloyd Minshall to his classmates and to O.A.C. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): O.A.C. ’38 Alumni with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: several awards of varying amounts

O.A.C. ’55 Access Bursaries [I3157]
Provided by the class of O.A.C. ’55 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): O.A.C. Class of ’55 with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students at any semester level in an O.A.C. degree program or students enrolled in the B.ENG program with demonstrated financial need and a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).

Amount: several awards of varying amounts

O.A.C. ’57 Bursaries [I3518]
Provided by the Class of O.A.C. ’57 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): O.A.C. ’57 and the O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: several awards of varying amounts

O.A.C. Alumni Foundation Access Bursaries [I3533]
Provided by the O.A.C. Alumni Foundation, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: several awards of varying amounts

Last Revision: July 4, 2019 2019-2020 Undergraduate Calendar
OAC Student Aid Bursary [I3590]

Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Anonymous with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students registered in any OAC Undergraduate Degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: several awards of varying amounts totalling $8,000

Ontario Co-operatives R.P. Forshaw Bursary [I3013]

The Co-operatives, Credit Unions, friends and associates of Prof. R. P. Forshaw have established this bursary. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7 and a letter indicating membership of co-op or credit unions.

Donor(s): The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw

Qualification(s): Undergraduate students who have financial need. Preference may be given to candidates who have been or are members of a co-operative or credit union.

Amount: 1 award of $400

Ontario First Generation Bursary [I3062]

The Ministry of Advanced Education & Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.

Donor(s): Ministry of Advanced Education & Skills Development (MAESD)

Qualification(s): Students registered in any program who are first generation students - Ontario residents (as defined by OSAP) and who have demonstrated financial need.

Amount: several awards ranging in values from $1,000 to $3,500

Ontario Grape Growers Bursary [I3033]

Offered by the Ontario Grape Growers Action Committee. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): The Ontario Grape Growers Action Committee

Qualification(s): Students with good academic standing in semesters 3 to 6 of a degree program or semesters 3 to 4 of a diploma program administered by O.A.C., and demonstrated need of financial assistance.

Amount: Several of various amounts

Reid's Heritage Homes Bursaries in Landscape Architecture [I3521]

Established by Reid’s Heritage Homes with the assistance of the Ontario government’s OSOTF program to assist students who are full-time students, Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Reid’s Heritage Homes Ltd. with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time students registered in the B.L.A. program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

Robert Auger Humanitarian Bursary [I3058]

Established in memory of Bob Auger, a former Associate Registrar at the University of Guelph. It is intended as an emergency fund to assist students who unexpectedly find themselves in difficult financial situation who could benefit from receiving a grocery voucher. To be considered, students must have completed a Financial Aid Assessment form and arrange an appointment with a Financial Aid Counsellor. Appointments can be made by calling 519-824-4120 extension 58715.

Donor(s): Family and friends of Robert Auger

Qualification(s): Students registered in any degree program with an unexpected financial emergency.

Amount: Several grocery vouchers or book vouchers

Scotiabank Bursaries [I3532]

Established by Scotiabank, with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Scotiabank with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,500

Shirley Endean Bursaries [I3570]

These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

Donor(s): Estate of Shirley E. Endean & multiple donors with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: Several awards of varying amounts

Student Financial Services Bursary [I3107]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph

Qualification(s): Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

Amount: Several awards up to a maximum of $6,000

T.K. Warley Bursaries [I3510]

Established by O.A.C. Alumni Association, with the assistance of the Ontario government's OSOTF program, to recognize Professor T.K. Warley's significant contribution to the O.A.C. Alumni Foundation and to students through teaching and promotion/development of "Experience Agriculture". A degree student may receive this bursary twice. Apply by letter outlining extracurricular involvement and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): O.A.C. Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students with demonstrated financial need who are in semester 5 to 8 of any degree program within O.A.C. A minimum 65% is required, as well as participation in student activities, governance, and/or college affairs. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

Uffelmann Connor Family Bursary for Indigenous Students [I3109]

Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Métis or Inuit).

Donor(s): Marie Uffelmann and Dean Connor

Qualification(s): Students registered in any program who self-identify with First Nations (Status and non-Status), Métis or Inuit ancestry and who demonstrates financial need.

Amount: 1 award of $1,000
IX. Scholarships and Other Awards, Bachelor of Landscape Architecture

Uffelmann Connor Family First Generation Bursary [13108]

Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as a first-generation student.

**Donor(s):** Maris Uffelmann and Dean Connor
**Qualification(s):** Student registered in any program who is a first-generation student (First generation students (parents did not attend post-secondary studies, full-time or part-time, in or outside Canada at any time or in any program) registered in any program with demonstrated financial need. and who demonstrates financial need.

**Amount:** 1 award of $1,000

University of Guelph Access Bursaries [13522]

Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**ACCESS AWARD.**

**Donor(s):** Alumni and Friend of the University of Guelph with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of $500. Several awards of $2,000

University of Guelph Alumni Association Access Bursaries [13523]

Established by the University of Guelph Alumni Association, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**ACCESS AWARD.**

**Donor(s):** University of Guelph Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in any program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).

**Amount:** 1 award of $1,250

University of Guelph International Bursary [13048]

The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Students should apply to the International Student Advisor by Nov. 1 for the fall semester; March 1 for the winter semester, and July 2 for the summer semester with a completed International Student Financial Need Assessment Form (N.A.F.). If students have an emergency situation, please contact the International Student Advisor, in Student Life, University Centre, Level 3.

**Donor(s):** University of Guelph
**Qualification(s):** International students registered in a degree program who have completed a minimum of 4.0 credits and are registered in a minimum of 1.5 course credits.

**Amount:** Several varies

University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [13047]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph
**Qualification(s):** Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards to a maximum of $2,000

University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [13037]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph
**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards up to a maximum of $6,000

University Student Assistance Program [13057]

These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph
**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).

**Amount:** Several awards of various amounts to a maximum of $1,000

Virginia Conner Memorial Bursary [13110]

This bursary was created to recognize the farming contributions and community spirit of Mr. Barlow. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Estate of Virginia Conner
**Qualification(s):** Students registered in any program offered by OAC with demonstrated financial need.

**Amount:** several awards of up to $2,000

William Barlow Memorial Bursary [3101]

This bursary was created to recognize the farming contributions and community spirit of Mr. Barlow. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Mr. William Barlow
**Qualification(s):** Students registered in any program within the Ontario Agricultural College at the University of Guelph who is from Durham Region, Northumberland County, or County of Victoria including City of Kawartha Lakes and has demonstrated financial need.

**Amount:** 1 award of $3,000

In-course Travel Grants

E.F. Wolff International Scholarship [T0313]

The late Frank E. Wolff was a faculty member and a graduate of O.A.C. He was active in the O.A.C. Alumni Foundation and in the establishment of the O.A.C. Alumni Foundation. This scholarship fund was established in memory of Frank E. Wolff, Mr. A.O. Wolff and family. As a faculty member, he studied the techniques of artificial insemination of cattle in Denmark and upon his return in 1939, employed these techniques in the O.A.C. herd. Apply to the OAC Awards Office by February 1 with a letter outlining the cost of your trip for this course. Please be sure to include your name, student ID number, your program of study and the award you’re applying to on your application. Please email your application to oacaward@uoguelph.ca and include the award name and ID number in the subject line.

**Donor(s):** Mr. A.O. Wolff (Sr.)
**Qualification(s):** Students registered in any program offered by OAC with a minimum 70% cumulative average and who are registered AGR*2500 (Field course in International Agriculture with field trip to Costa Rica).

**Amount:** several awards of varying amounts

O.A.C. ‘54 International Study Scholarship [T0586]

Established in memory of Beth Duncan to support students participating in an exchange program, study abroad semester, or a field trip course. Submit a letter (of not more than two pages) outlining the intended international study program, reasons for choosing the program and the anticipated benefits of participation. Letters should also include a brief summary of extracurricular and student related activities. Letters of reference will be considered. Apply to the O.A.C. Awards Office by May 15, no more than two semesters prior to the commencement of the program.

**Donor(s):** Class of O.A.C. ‘54
**Qualification(s):** Currently registered students in O.A.C. who are Canadian citizens or permanent residents with a minimum 75% cumulative program average who intend to participate in an exchange program, semester abroad, or field trip course.

**Amount:** 2 awards of $3,000
Bachelor of Science

Please refer to the General Statement on Awards for:

- Award Eligibility
- ACCESS Awards Eligibility
- Ontario Student Opportunity Trust Fund (OSOTF) Program
- How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

Entrance Scholarships

Amos & William Lowe Memorial Scholarship [E0158]

Endowed by the late William B. Lowe of Fort Francis, Ontario. Preference will be given first to eligible students from the district of Rainy River, then from the district of Kenora or Thunder Bay, and finally from the remaining districts of Northern Ontario. Application is not required.

Donor(s): William B. Lowe and Amos Edgar Lowe
Qualification(s): Student entering any of the undergraduate degree programs of the Ontario Agricultural College.
Amount: 1 award of $2,000

Angelo and Frank Agro Undergraduate Scholarship [E0520]

These scholarships are provided by the Agro Scholarship Fund. Apply, by April 15, to Student Financial Services (awards@uoguelph.ca), with a one to two-page, point-form listing of 4-H activities. This list should describe current or past activities within 4H and the position titles/names, if applicable. Attach a reference letter from a 4H club official. These scholarships will be awarded to the students demonstrating the most active involvement with 4H clubs. The committee will consider any appropriate elements, such as the length of membership in 4H, leadership role(s) in support of 4H, creativity in 4H outreach, and coordination with other rural and academic activities. Credit will be given to those who have achieved in county, provincial and national 4H competitions. Recipients must maintain full-time studies and at least a 70% program average each year for continuation of the award.

Donor(s): The Frank Agro Estate
Qualification(s): Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 - 4H projects.
Amount: 7 awards of $7,000 (payable over 4 years of study)

Atkinson Family Scholarship [E0972]

Established by the Atkinson Family in honour of Walter McFee and Johnny Atkinson for their passion for farming, family and community. Selection will be based on highest admission average. No application required.

Donor(s): Amy and Bryan Atkinson
Qualification(s): Students entering any degree program offered by the Ontario Agriculture College (OAC).
Amount: 1 award of $1,000

Barry Lee Scholarship for Agricultural Excellence [E0797]

Established to recognize Barry Lee’s 19 years of service as a Counsellor and his strong support of rural and agricultural activities in the region. Preference will be given to students from the Regional Municipality of Halton. Selection will be based on highest admission average. No application is required.

Donor(s): Regional Municipality of Halton
Qualification(s): Students entering any undergraduate program offered by OAC.
Amount: 1 award of $1,000

Board of Governors' Scholarships [E0317]

This scholarship is considered one of the University of Guelph's most prestigious entrance scholarships with only 25 awards being awarded each year. Recipients of this scholarship are entering their program with one of the highest admission averages of that cohort. The scholarship will be renewed each year provided recipients remain registered in full-time studies and achieve a minimum 80.0% average in their previous academic year of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80.0% or better average in the previous academic year of full time study. Payments lost cannot be added to the end of the award period. This award cannot be held with the President’s, Lincoln Alexander Chancellor’s or Chancellor's Scholarships. Application is not required.

Donor(s): Board of Governors
Qualification(s): Academically outstanding entering students with the highest admission averages of the entering cohort.
Amount: 25 awards of $20,000 (payable over 4 years of study)

Chancellor’s Scholarships [E0688]

This scholarship was established in 2009 in honour of current and past University of Guelph Chancellors and is considered one of the most prestigious entrance awards offered by the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the President’s Scholarships, the Lincoln Alexander Chancellor’s Scholarships, or the Board of Governors’ Scholarships.

Donor(s): University of Guelph
Qualification(s): Students entering a degree program with a minimum 90% admission average who have taken leadership roles in activities that demonstrate an interest in international relations and development, or leadership roles in activities relating to arts and culture and demonstrate the potential to become a leader in society.
Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

December 6th Memorial Scholarship [E0005]

This scholarship, established by the Faculty Association, is awarded in memory of the fourteen women murdered in December 1989 at Ecole Polytechnique and is intended to attract women to a profession that is largely comprised of men. The recipient will be selected on the basis of academic performance. For continued eligibility beyond semester 1, the student must maintain a minimum of 70% cumulative average and full-time studies. Application is not required.

Donor(s): University of Guelph Faculty Association
Qualification(s): Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Engineering and Physical Sciences.
Amount: 1 award of $2,250 ($750 in each of semesters 1, 3 and 5)

Dr. C. John Small Commonwealth Scholarship [I0611]

Established in honour of Dr. C. John Small, OAC BSA ‘42, Hon. D. Law ’75, and his lifelong dedication to foreign service. Selection will be based on the assessment of: (a) a one-page submission describing the significance for the student visiting Guelph to the program of study at the partner exchange University, (b) two faculty references of no more than one-page each, and (c) consistent high performance in course work completed, as documented by a transcript of program grades to date. Apply to the Centre for International Programs by May 1 for visiting during the subsequent Fall or Winter semesters with the above mentioned documents.

Donor(s): Mrs. Jean K. Small
Qualification(s): Full-time visiting exchange students registered for at least one semester from a Commonwealth developing country who are pursuing studies or conducting research in the area of agriculture and rural development.
Amount: 1 award of $1,500

Dr. Jack Britney Scholarship [E0034]

Established in memory of Dr. Jack Britney, a graduate of ‘57A and O.A.C. ’60 and former faculty member in the former School of Food Agriculture and Resource Economics and Extension Education. Selection will be based on the students entering with the highest admission average. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a statement indicating the program and where the Diploma was taken and when.

Donor(s): Friends and Associates
Qualification(s): Students entering any OAC degree program with a preference given to students who graduated from any University of Guelph Associate Diploma program.
Amount: 1 award of $1,750

Dr. Robert McCrindle Academic Scholarship in Chemistry [E0837]

Wellington Laboratories established this award to recognize Dr. Robert McCrindle, former Chair of the Chemistry Department and Dean of the College of Physical and Engineering Science. The scholarships will be awarded to the 2 students with the highest admission averages and is not tenable with the Prof. John D. Goddard Honours Chemistry Entrance Scholarship [E0789] or the Honours Chemistry Entrance Scholarship [E0130]. No application is required.

Donor(s): Wellington Laboratories Inc.
Qualification(s): Students entering the Bachelor of Science with a major in Chemistry.
Amount: 2 awards of $5,000
Earl B. MacNaughton Entrance Scholarships [E0172]

Established by friends, faculty, staff, alumni and students of the University to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Emphasis during selection will be given to academic achievement in high school science and mathematics. Application is not required.

**Donor(s):** Earl B. MacNaughton  
**Qualification(s):** Students with high academic standing, entering an honours program in the College of Engineering and Physical Sciences.  
**Amount:** 4 awards of $2,000

Ed Carter/University of Guelph Faculty Association Scholarship [E0292]

Award is payable at $750 per annum in the student's 1st, 3rd, and 5th semester levels, provided a cumulative average of at least 70% is maintained. To receive the final payment, the recipient would normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.

**Donor(s):** University of Guelph Faculty Association  
**Qualification(s):** Students entering any undergraduate degree program at the University of Guelph from Wellington county.  
**Amount:** 1 award of $2,250 ($750 in the 1st, 3rd, and 5th semesters)

Ernie Kendall Science Entrance Scholarship [E0668]

Established by Ernest Kendall, O.A.C. B.S.A. 1932 and awarded to the student entering a science program with the highest admission average. Preference will be given to students that graduated from Elmira District School. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Board of Governors' Scholarships. Application is not required.

**Donor(s):** Ernie W. Kendall  
**Qualification(s):** Students entering any sciences (B.Sc., B.Sc.(Agr.), B.Sc.(Env.), B.Sc.(Tech), B.A.Sc., B.A.S., B.B.R.M., B.Eng.) degree program with a minimum 80.0% admission average.  
**Amount:** 1 award of $2,000

Frederick Hutt Scholarships [E0319]

Dr. Frederick B. Hutt, O.A.C. ’23 and Professor Emeritus of Animal Genetics at Cornell University offers this scholarship. Application is not required.

**Donor(s):** Dr. Frederick B. Hutt  
**Qualification(s):** Students from Wellington County entering a College of Biological Science program with a minimum admission average of 85%.  
**Amount:** 2 awards of $700

GFTC Legacy Fund Experience Scholarships [E0918]

In recognition of the Guelph Food Technology Centre’s (GFTC) long association with University of Guelph the GFTC Board has created these scholarships. These scholarships recognize academic excellence and encourage students to study and pursue careers in the food sector. Selection is based on high school science and mathematics. Application is not required.

**Donor(s):** The Guelph Food Technology Centre (GFTC)  
**Amount:** 4 awards of $11,500 (payable over 4 years of study)

GFTC Legacy Fund UG Entrance Scholarship [E0899]

In recognition of the Guelph Food Technology Centre’s (GFTC) long association with University of Guelph the GFTC Board has created the GFTC Legacy Fund Undergraduate Entrance Scholarships. These scholarships recognize academic excellence and encourage students to study and pursue careers in the food sector. Selection is based on highest admission average. No application required. Not tenable with the Board of Governors' Scholarship, Chancellor’s Scholarship, Devine Family Scholarship, Lincoln Alexander Chancellor's Scholarship and President's Scholarships. If there are insufficient eligible candidates in any one of the academic programs noted above, in any given academic year, the scholarship(s) will be redistributed to eligible candidates from any other of the identified academic programs. Preference will be given to eligible candidates in the B.Sc. Food Science program. In order to maintain eligibility, students must remain registered in one of the specified programs.

**Donor(s):** The Guelph Food Technology Centre (GFTC)  
**Amount:** 17 awards of $14,000 (payable over 4 years of study)

Gordon McNally Memorial Scholarship [E0203]

In memory of Gordon McNally, Professor of Zoology in the Ontario Agricultural College (1934-1971) and College of Biological Science (1971-1979), who had a great interest in extracurricular activities. The recipient will be selected on the basis of academic performance and demonstration of outstanding contributions to extracurricular activities and/or community services. Apply to Student Financial Services (awards@uoguelph.ca) by April 15 with a letter demonstrating contributions to extracurricular activities.

**Donor(s):** Jean and Peter Gower  
**Qualification(s):** Students entering any undergraduate degree program offered by the College of Biological Sciences.  
**Amount:** 1 award of $500

Gordon W. Innes Scholarship [E0140]

Application is not required.

**Donor(s):** Gordon W. 'Sparks' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.  
**Qualification(s):** Student entering any degree program from Oxford County with the highest admission average.  
**Amount:** 1 award of $1,000

Hardy International Student Scholarship [E0659]

Selection is based on the assessment of the student's admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.

**Donor(s):** Mrs. Marion Hardy  
**Qualification(s):** Full-time international students (defined as paying the international student tuition and fees) entering any degree program.  
**Amount:** 1 award of $2,000

Honours Chemistry Entrance Scholarship [E0130]

This scholarship will be awarded to the student entering with the highest admission average. Award is not tenable with the Dr. Robert McCrindle Academic Scholarship in Chemistry [E0837] or the Prof. John D. Goddard Honours Chemistry Entrance Scholarship [E0789]. Application is not required.

**Donor(s):** Faculty of the Department of Chemistry and their scholarship fund  
**Qualification(s):** Students entering semester one of the B.Sc. Honours Biological and Pharmaceutical Chemistry major or the Honours Chemistry major of the BSc program.  
**Amount:** 1 award of $500

Honours Physics Scholarship [E0132]

Several of these awards will be offered on a competitive basis to students entering with the highest admission averages. The number of scholarship offers is dependent on the cohort pool of applicants. Application is not required.

**Donor(s):** Department of Physics  
**Qualification(s):** Students entering the first semester level of the B.Sc. program or the B.Sc. (Tech.) program with a minimum 85.0% admission average and a declared intention of pursuing a major in Physics, Physics and Technology, Biophysics, Chemical Physics, or Theoretical Physics, or a Co-op stream of these programs.  
**Amount:** Several awards of $4,000
### International Student Entrance Scholarships [E0408]

In support of the University's strategic direction of internationalism, entrance scholarships are available each Fall semester to the top international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all relevant documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.

**Donor(s):** University of Guelph  
**Qualification(s):** Students on a "student visa" entering an undergraduate degree program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.  
**Amount:** Several awards ranging in value from $5,500 - $8,500

### J.D. MacLachlan Scholarship [E0170]

Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.

**Donor(s):** The J.D. MacLachlan Trust  
**Qualification(s):** Students entering any degree program at the University of Guelph.  
**Amount:** 1 award of $1,500

### Jack and Lillian MacDonald Scholarship [E0379]

Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

**Donor(s):** Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald  
**Qualification(s):** Entering students coming from the Six Nations Polytechnic (SNP).  
**Amount:** 1 award of $900

### James MacMillan Memorial Scholarship [E0494]

Established in memory of James MacMillan, his great uncle, by Austin Conway of Toronto. Selection will be based on highest cumulative average. Application is not required.

**Donor(s):** Austin Conway  
**Qualification(s):** Students entering any program offered by OAC who graduated from an Associate Diploma program from the University of Guelph. Preference will be given to students from Eastern Ontario which includes the counties of Prescott and Russell, Stormont, Dundas and Glengarry, Lanark, Renfrew, Leeds and Grenville, Frontenac and Lennox and Addington; and the City of Ottawa and to students entering the Bachelor of Science in Agriculture or the Bachelor of Commerce in Food and Agricultural Business, or the Bachelor of Arts with a major in Food, Agricultural and Resource Economics (FARE).  
**Amount:** 1 award of $2,500

### Lincoln Alexander Chancellor’s Scholarships [E0689]

Established in 2001 in honour of Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This award cannot be held with the President’s Scholarships, the Chancellor’s Scholarships or the Board of Governor’s Scholarships.

**Donor(s):** Many Donors  
**Qualification(s):** Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.  
**Amount:** 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

### Mathematical Science Scholarship [E0131]

This scholarship is awarded to the student with the highest admission average. Application is not required.

**Donor(s):** The Department of Mathematics and Statistics  
**Qualification(s):** Students entering a program with a major offered by the Department of Mathematics and Statistics.  
**Amount:** 1 award of $1,000

### McArthur-Humphries Scholarship [E0183]

An equal number of awards are available to students from each county. In the case of insufficient eligible applicants from one county, the awards will be given to eligible applicants from the other county. These scholarships are awarded to students with the highest admission averages. Application is not required.

**Donor(s):** Wilhelmina McArthur-Humphries Trust Fund  
**Qualification(s):** Students entering any degree program with a minimum 75% admission average from Lanark and Wellington Counties.  
**Amount:** 8 awards of $1,000

### Nanoscience Entrance Scholarship [E0747]

The scholarships will be awarded to the students with the highest admission average. No application necessary.

**Donor(s):** Dean’s Office College of Physical and Engineering Science  
**Qualification(s):** Students entering the B.Sc. Nanoscience major with a minimum admission average of 80%.  
**Amount:** 2 awards of $1,000

### OAC 1968 Scholarship [E1008]

The Class of OAC 1968 established this bursary to celebrate their 50th anniversary. In reflecting on many of their own experiences the class generously supports undergraduate students in any OAC program with demonstrated financial need. Selection will be based on greatest financial need. Students must maintain enrolment in an OAC academic program to maintain their award. Students do not need to continue to demonstrate financial need for all 4 years to continue to receive this award. Apply by April 15 with a completed Financial Need Assessment Form for Entrance Awards (E,N,A,F) and a summary of agriculture related activities to Student Financial Services (awards@uoguelph.ca).

**Donor(s):** The Class of OAC 1968  
**Qualification(s):** Students entering any OAC degree program who have demonstrated financial need. Preference will be given to students who participated in agriculture-related activities/organizations during their high school career such as Junior Farmers or 4-H.  
**Amount:** 1 award of $10,000 (payable over 8 semesters)

### OAC Specialist High Skills Major Program Scholarships (SHSM) [E0832]

The scholarships will be awarded to the 3 students with the highest admission averages. No application is required.

**Donor(s):** OAC Dean’s Office Liaison Program  
**Qualification(s):** Students entering any OAC undergraduate program with a minimum 75% admission average who are/were registered in the Specialist High Skills Major (SHSM).  
**Amount:** 3 awards of $1,000
President’s Scholarship [E0238]

Established in 1987 in honour of their donors or distinguished members of the University and are considered one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the Chancellors’ Scholarships, the Lincoln Alexander Chancellor’s Scholarships or the Board of Governors’ Scholarships.

Donor(s): A number of President’s Scholarships have been named in honour of the following people and/or donors: Cecil H. Franklin and Ingrid Franklin

In honour of Cecil Franklin, former Chair of the Board of Governors and Honorary Fellow of the University, the University of Guelph has named one of these twelve prestigious entrance awards to recognize his financial contributions and volunteer support to the President’s Entrance Scholarship program.

Charles S. Humphrey

In memory of Charles S. Humphrey, a former President of Hart Chemical Company Canada Ltd. and long-time friend, the University has named one of these twelve prestigious entrance awards to recognize his financial contribution through his estate to the President’s Entrance Scholarship program.

Jack R. Longstaffe

The University of Guelph has named one of these twelve prestigious entrance awards in memory of Jack R. Longstaffe to recognize his financial contribution through his estate to the President’s Entrance Scholarship program.

Burton C. Matthews

The University of Guelph has named one of these twelve prestigious entrance awards in honour of Burton C. Matthews to recognize his insight and leadership in establishing the President’s Entrance Scholarship program.

Kathleen and Frederick Metcalf

Mr. and Mrs. F.T. Metcalf of Guelph have endowed this award. After a distinguished career in cable TV, broadcasting and publishing, the late Mr. Metcalf retired as President of Maclean Hunter Ltd. and Chairman of the Board of Maclean Hunter Cable Ltd. He was Honorary Chairman of Maclean Hunter Cable Ltd. and a member of the University of Guelph Heritage Board (1996).

Rol-land Farms Limited

Two of the scholarships are endowed by the four shareholders of Rol-land Farms Limited of Blenheim, Ontario, Hank, Peter, Arthur and Eric Vander Pol and their families. The Vander Pol families are generous supporters of a number of University projects and programs.

Lillian Stewart Usher

The University of Guelph has named one of these twelve prestigious entrance awards in honour of Lillian Stewart Usher a friend of the University to recognize her financial contribution through her estate to the President’s Entrance Scholarship program.

Qualification(s): Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and/or communities.

Amount: 8 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

Project Hero Scholarship [E0979]

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship program. However, recipients who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent participated during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

Donor(s): University of Guelph

Qualification(s): Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

Amount: Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

Quinn Memorial Scholarship [E0578]

Established in memory of Ronald J. Quinn (O.A.C. ’35) to an entering O.A.C. international full-time or exchange student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application is not required.

Donor(s): Mrs. Helen Quinn (O.A.C. ’35)

Qualification(s): Entering semester one of an O.A.C. program to an international full-time student or to an international exchange student with a preference to those students from developing nations.

Amount: 1 award of $2,000

Robert Orr Lawson Microbiology Entrance Scholarship [E0489]

Provided through a generous bequest from the estate of Robert Orr Lawson, with matching support from the Department of Molecular and Cellular Biology, this scholarship is intended to encourage study and research related microbiology of foods and will be awarded to the student entering with the highest admission average. The scholarship will be paid over four years in installments of $1,000. The second to fourth payments are contingent upon obtaining a minimum average of 77% over the previous two semesters of full-time study in the major. Students who fail to qualify for a payment may re-qualify for the subsequent payments by obtaining a 77% or better average in the succeeding two academic semesters of full-time study. This scholarship may be held with any other awards except the Microbiology Entrance Bursary, or any of the other Robert Orr Lawson Microbiology Scholarships. Application is not required.

Donor(s): Department of Molecular and Cellular Biology and the estate of the late Robert Orr Lawson

Qualification(s): Students entering the Microbiology major in the B.Sc. program with a minimum admission average of 80%.

Amount: 1 award of $4,000 (payable over 4 years of study)

Samuel Acker Memorial Scholarship [E0001]

Preference will be given to students whose home residence is in Wellington, Waterloo or Perth County and selection will be based on high academic achievement. Application is not required.

Donor(s): The trustees of the estate of the late Samuel Acker (Mr. David Acker and Mr. Abraham Acker)

Qualification(s): Student entering the first semester level of the B.Sc. program in the College of Engineering and Physical Sciences. Preference may be given to students whose home residence is in either Wellington, Waterloo or Perth County.

Amount: 1 award of $1,000
Ted Morwick Scholarship [E0796]
Established by Mr. Edward (Ted) Morwick, honorary alumni. The student with the highest admission average will be selected. This award is conditional on maintaining a 80% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify. (i.e. The student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year.) If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with the Chancellor's, President's or Board of Governors' Scholarships. No application is necessary.
Donor(s): Mr. Edward (Ted) Morwick
Qualification(s): Students entering any degree program in the College of Arts.
Amount: 4 award of $8,000 (payable over four years.)

University of Guelph Entrance Scholarships [E0291]
The value of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student's financial account in two equal payments in the fall and winter semesters. Application is not required.
Donor(s): University of Guelph
Qualification(s): Students entering their first year of post-secondary studies for the first time with a minimum 85.0% admission average.
Amount: Several awards of $2,000, Several awards of $3,000

W. Penri Morris Memorial Scholarship [E0430]
Established by the family in memory of Penri Morris, who was killed World War II action in 1944 at the age of 21. Penri grew up on the family fruit farm near Forest, Ontario. After graduating from high school, he joined the Royal Canadian Air Force and was attached to the Royal Air Force Bomber Command as a navigator at the time of this death. Awarded to the student with the highest cumulative academic performance above 75% in all courses of the last year in high school study (full-time or equivalent study). Application is not required.
Donor(s): Prof. Rosalina Morris
Qualification(s): Students entering first year of any undergraduate program from North Lambton Secondary School in Forest, Ontario, in their absence, from Lambton County, and their absence, from Ontario.
Amount: 1 award of $1,000

W.C. Blackwood Memorial Entrance Scholarship in Physics [E0029]
Application is not required.
Donor(s): Mr. B.A. Ward
Qualification(s): Student entering the first semester level of the B.Sc. program, who declares the intention to pursue an honours program in Physics.
Amount: 1 award of $500

Walter and Halina Slabikowski Scholarship [E0766]
This scholarship was established in memory of Walter and Halina Slabikowski who sent their first generation Canadian born children to university to enrich their lives and provide them with greater opportunities. The award will be given to the student with the highest admission average. The residence deposit must be received by published deadline date.
Submit by email to awards@uoguelph.ca your full name, student ID number and a statement attesting to your parents’ place of birth and non participation in post secondary education by April 15th.
Donor(s): Irene Thompson and Slabikowski Family
Qualification(s): Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary studies.
Amount: 1 award of $1,000

Waterloo-Wellington Science & Engineering Fair (WWSEF) Scholarship [E0619]
Established to recognize excellence of the project submissions and encourage students to pursue university studies at the University of Guelph.
Donor(s): University of Guelph
Qualification(s): Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.
Amount: various awards of $1,000

Entrance Scholarships with Financial Need

Bill Klop Memorial Scholarship [E0150]
Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Application by letter, to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by April 15. Students should complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).
Donor(s): Ross and Mary Lou Klop
Qualification(s): Students entering first year of any undergraduate program from North Waterloo with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.
Amount: 1 award of $500

Colwyn Rich Food Science Scholarship [E0940]
Established in the fall 2015 to honour Mr. Colwyn Rich. Selection will be based on greatest financial need. Apply to Student Financial Services by April 15th by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the "Colwyn Food Science Scholarship Application". Deadline to submit the complete application (both parts, the E.N.A.F. and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenable with other awards.
Donor(s): The Colwyn and Jean Rich Foundation
Qualification(s): Canadian citizens or permanent residents who are entering the BSc. program with a major in Food Science who have a minimum 80% admission average and demonstrated financial need. Preference will be given to a student in the co-op program.
Amount: 1 award of $28,000 (payable over 4 years)

Devine Family Scholarships [E4542]
Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of Governors member, with the assistance of the Ontario government's OTSS program. These scholarships will be given out once every four years, unless the incumbent fails to qualify. The scholarship is renewed in years two, three and four with continued demonstrated financial need and full-time registration; students are required to register for no less than 2.0 credits each semester. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the "Devine Family Scholarship Application". Deadline to submit the complete application (both parts, the E.N.A.F. and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Chancellor's Scholarships, but can be held with all other entrance awards. ACCESS AWARD.
Donor(s): Mr. Peter J. Devine with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students who are Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person entering any University of Guelph undergraduate degree program with a minimum 80% admission average. Preference will be given to students who are Black Canadians. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: up to 2 awards of $50,000 each (payable over 4 years of study)

Gary Knechtel Memorial Scholarship [E4500]
Established in memory of Gary Knechtel (1943 - 1988) a revered and outstanding leader in the food industry and a long time member of the Canadian Institute of Food Science and Technology. The recipient will be encouraged to participate in extracurricular activities and to participate in the activities of the Ontario Section of the Canadian Institute of Food Science and Technology. Subsequent installment payments are dependent on continued demonstration of financial need and satisfactory progress in Food Science major. Students apply by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. Selection will be based on the highest admission average. ACCESS AWARD.
Donor(s): Ontario Section, Canadian Institute of Food Science and Technology with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students graduating from a secondary school in Ontario and are entering the Food Science major of the BSc degree with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $8,000 (payable over 4 years of study)
Interhall Council Entrance Scholarship [E0636]

Established by the Interhall Council, the residence student government that programs, advocates and represents residence students to administration and Student Housing Services (www.interhall.ca), to ensure that the residence experience remains accessible to students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15.

Donor(s): Interhall Council

Qualification(s): Students entering a full-time undergraduate degree program with a minimum 85.0% admission average, residing in residence during first year on the Guelph campus with demonstrated financial need and demonstrated strong leadership ability.

Amount: 5 awards of $1,000

Kenneth O. Hammill-Blount Canada Scholarship [E4356]

Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government's OSOTF program. Selection will be based on greatest financial need from the President’s, Lincoln Alexander Chancellor’s or Chancellors’ Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President’s, Lincoln Alexander Chancellor’s or Chancellors’ Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. ACCESS AWARD.

Donor(s): The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Entering students who have applied for the President’s, Lincoln Alexander Chancellor’s or Chancellors’ Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $9,600 (payable in 8 payments of $1,200)

L. Norman Gibbins Microbiology Scholarship [E4392]

Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government's OSOTF program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD.

Donor(s): Family, friends and colleagues of Norman Gibbins with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering the Microbiology major in the B.Sc. program with a minimum 80% admission average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $2,500

Microbiology Entrance Scholarship [E3545]

Provided through a generous bequest from the estate of Robert Orr Lawson and the Department of Molecular and Cellular Biology, with the assistance of the Ontario government's OSOTF program. The bursary will be paid over four years in installments of $1,000. The second to fourth payments are contingent upon obtaining a minimum average of 77%, having completed 5, 10 and 15 credits of study in the major and demonstrating financial need. Students should complete the online Financial Need Assessment Form (N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. This bursary may be held with any other award, except any of the Robert Orr Lawson Scholarships. ACCESS AWARD.

Donor(s): Department of Molecular and Cellular Biology and the estate of Robert Orr Lawson with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Entering student in the Microbiology major in the B.Sc. program who has a minimum 80% average and who has demonstrated greatest financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $4,000 (payable over 4 years)

OAC 1966 Entrance Scholarship [E0903]

In recognition of the contribution made to our lives by the Ontario Agricultural College, the graduates of 1966 O.A.C have established this scholarship to assist a well-qualified student to come to Guelph and become an “Aggie”. Students must complete the online Entrance Financial Need Assessment form as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted) or by April 15.

Donor(s): Class of OAC 1966

Qualification(s): Students entering any degree program offered by O.A.C with demonstrated financial need and are Ontario residents.

Amount: 2 awards of $5,000

P.A. Clarke Family Scholarship [E0381]

Paul and Aileen Clarke and their family established the endowment for this entrance scholarship in honour of Paul’s father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining extracurricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not a requirement. This award is not tenable with the President's Scholarships or Lincoln Alexander Chancellor's Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

Donor(s): Paul and Aileen Clarke

Qualification(s): Students with a minimum 80% average with a record of leadership and community participation. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm.

Amount: 1 award of $12,000 (payable over 4 years)

Robert C. Skipper Scholarship [E0485]

Established by Robert C. Skipper, Diploma in Agriculture 1948 and B.S.A. 1951. Selection will be based on academic standing, participation in extra-curricular activities and involvement in primary production and/or rural community activities. Financial need may also be considered. Apply to Student Financial Services (awards@uoguelph.ca) by April 15 with a one-page summary outlining activities and by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).

Donor(s): Mr. Robert C. Skipper

Qualification(s): Students entering a degree program in O.A.C who have graduated with a Diploma in Agriculture or Horticulture from the University of Guelph's Ridgetown campus.

Amount: 1 award of $750

Rol-Land Farms Scholarships [E4519]

Established by Rol-Land Farms, with the assistance of the Ontario government's OSOTF program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD.

Donor(s): Rol-Land Farms with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students entering a degree program with demonstrated financial need and a minimum 80% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 13 awards of $2,000
Sleeman Brewing Scholarships [E4267]

Established by the Sleeman Brewing and Malting Company, with the assistance of the Ontario government’s OSOTF program. One award alternates between a B.Sc. student in the College of Biological Science and the College of Engineering and Physical Sciences (beginning with C.E.P.S in 2000/2001); one award is available to a B.Comm. student in a major offered by the School of Hospitality, Food and Tourism Management. Selection is by the University Bursary Committee. Students should complete the online Financial Need Assessment Form (N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

**Donor(s):** The Sleeman Brewing & Malting Company with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time entering students registered in the B.Sc. program in the College of Biological Science or the College of Engineering and Physical Sciences and B.Comm. students, in a major offered by the School of Hospitality, Food and Tourism Management with a minimum admission average of 80% and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,000

Entrance Bursaries

Dorothy Wright Entrance Bursary [E3075]

Established in memory of Miss Dorothy Wright, sister, and Miss Dorothy Wright, aunt, of Mr. Ivor Wright, OAC 65A this bursary supports students entering any undergraduate degree program offered by the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15.

**Donor(s):** Mr. R. Ivor Wright

**Qualification(s):** Students entering any OAC degree program who have demonstrated financial need.

**Amount:** 1 award of $1,000

Elizabeth Maud Hunter (Shier) Bursary [E3575]

This award was created to assist first year students in obtaining a post secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing a similar situation. Preference given to a student from the County of Brock. Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F.) for Entrance Awards. ACCESS AWARD

**Donor(s):** The Estate of the Late William Henry "Harry" Hunter with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Students entering any undergraduate degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 3 awards of up to $4,500

First Year Student Residence Bursary [E3066]

These 5 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the on-line Financial Need Assessment Form for Entrance Awards by April 15.

**Donor(s):** Student Housing Services

**Qualification(s):** Students entering any degree program with demonstrated financial need.

**Amount:** 5 awards of $500

Fred Hindle Bursary [E3500]

Awarded in memory of Fred Hindle, O.A.C.’38, a long-time generous supporter of his Alma Mater, who at the time of his death, wanted future students to have the same opportunity for an education as he had received. This bursary is awarded with the assistance of the Ontario government’s OSOTF program. This bursary is dependent on continued demonstration of financial need and successful completion of study to advance into the next year. Students should complete the online Financial Need Assessment Form (N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD.

**Donor(s):** W. Roy Hindle and family with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Entering O.A.C. degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).

**Amount:** 1 award of $6,000 (payable over 4 years)

Harvey Graham Bursary [E3030]

Provided by Harvey Graham (O.A.C. ’39), Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a working farm and complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

**Donor(s):** Harvey Graham, O.A.C. ’39

**Qualification(s):** Students entering any degree program who come from a working farm and who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.

**Amount:** 1 award of $1,500

International Student Entrance Bursaries [E3043]

In support of the University’s strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students entering an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar’s Entrance Award Application to Student Financial Services.

**Donor(s):** University of Guelph

**Qualification(s):** Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.

**Amount:** Several awards ranging in value from $1,000 to $3,000

John A. Carther Bursary [E3086]

The late John A. Carther of Cornwall Ontario has created the John A. Carther Bursary to support students from Eastern Ontario. Preference will be given to students from the counties of Stormont, Dundas and Glengarry. Apply to Student Financial Services by April 15th by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).

**Donor(s):** The estate of John A. Carther

**Qualification(s):** Students entering any program offered by the Ontario Agricultural College with demonstrated financial need.

**Amount:** 1 award of $2,000

McCracken Family Bursaries [E3580]

Ron and Doreen McCracken from Scotland Ontario have created these bursaries in memory of his mother and father who farmed near Cobourg Ontario. These bursaries will provide opportunities for students to study agriculture and food at the OAC. Preference will be given to students who have graduated from high school with a Specialist High Skills Majors Program (SHSM). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. ACCESS AWARD.

**Donor(s):** Ron and Doreen McCracken with matching funding through the Ontario Student Trust for Student Support program

**Qualification(s):** Students entering any undergraduate degree program offered by OAC with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 5 awards of $3,000
Registrar's Entrance Bursaries [E0384]

Established by the University of Guelph to support entering undergraduate students with identified financial need. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services. This will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Bursary, but can be held with all other entrance awards.

Donor(s): University of Guelph
Qualification(s): Students entering any degree program with a minimum registration of 1.5 credits and demonstrated financial need.
Amount: 500 awards of $4,000

Robert Arthur Stewart Bursaries [E3272]

Established in memory of Mrs. Elsa H. Stewart of Pakenham, Ontario. Mr. Stewart graduated from the Ontario Agricultural College in 1933 and Mrs. Stewart from Macdonald Institute in 1932. Applicants for these bursaries should have a good academic record and an active interest in community affairs. A letter from the student and a recommendation from the County agricultural representative or the secondary school principal should be sent to Student Financial Services by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

Donor(s): The Estate of Mrs. H. Stewart
Qualification(s): Students from the Ontario Counties of Lanark and Renfrew, and the Regional Municipality of Ottawa-Carleton, entering the 1st semester of a degree program at the University of Guelph.
Amount: 14 awards of $1,000

Steven Jones Memorial Bursaries [E3077]

Established by Mr. and Mrs. Jones in memory of their late son, Steven Jones (B.Comm. '97). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. Selection will be made on demonstrated financial need.

Donor(s): Mr. Harry Jones
Qualification(s): Students entering any degree program with demonstrated financial need.
Amount: several awards of $2,000

University of Guelph Accessibility Bursaries [E3038]

Established by the University of Guelph to support students with substantial demonstrated financial need. In addition, students will be automatically approved for to participate in the work-study program conditional on the student securing a work-study approved position on campus. Participating in the work-study program is not required to hold this bursary. Payments of this award and the eligibility to participate in the work-study program are conditional upon the recipient receiving funding through their provincial/territorial and/or federal student loan assistance program and registration in a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Bursary, but can be held with all other Entrance Awards.

Donor(s): University of Guelph
Qualification(s): Students entering any degree program with demonstrated financial need and a minimum registration of 1.5 credits.
Amount: 200 awards of $14,000 (payable over 4 years) plus Work-study approval

Veriphy Skincare Scholarship for Women in STEM [E1092]

Supporting women and the pursuit of education in STEM are intrinsic values for the Veriphy founders. To support this commitment this scholarship has been established through the University of Guelph, where PhytoSpherix™ was discovered. Apply by completing the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. Selection will be based on greatest financial need.

Donor(s): Veriphy Skincare Inc.
Qualification(s): Female students entering a program offered by the College of Engineering and Physical Sciences with a minimum 80.0% admission average and demonstrated financial need.
Amount: 1 award of $1,000

In-course Scholarships

Aboriginal Student Engagement Scholarship [I0922]

Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA’s commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status), Métis or Inuit and outline volunteer/leadership experience within the Aboriginal community. The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but not be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

Donor(s): Aboriginal Student Association
Qualification(s): Students registered in any program who self-identify as First Nation (status and non-status), Métis or Inuit, who are engaged in the Aboriginal community either in their home community or at the University of Guelph.
Amount: 1 award of $1,000

Alex Peepee Memorial Scholarship [I0232]

A scholarship established by friends of the late Professor Alex Peepee. In assessing student leadership, activity in student organizations, athletics, teaching assistantships, etc. will be considered. Application can be submitted to the main office, HHNS by mid-February.

Donor(s): Friends of the late Professor Alex Peepee
Qualification(s): Student registered in a major offered by the Department of Human Health and Nutritional Sciences (Human Kinetics, Nutritional and Nutraceutical Sciences, or Biomedical Science) who have completed a minimum of 15.0 credits, have a high academic standing, and who displays marked qualities of leadership.
Amount: 1 award of $500 and a Certificate

Alumni House Call Centre Scholarship [I1020]

Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15th with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

Donor(s): Former Employees of the Alumni House Call Centre
Qualification(s): Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.
Amount: 1 award of $1,000

Alumna Joseph Tribute Scholarship [I0756]

Selection will be based on significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities in the following academic year. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

Donor(s): Dr. Alum Josep Dean of the College of Social and Applied Human Sciences from 2000-2010 & Mrs. Gillian Joseph (CSS BA '94, FACS MSc '96) along with contributing donors to the Alum Joseph Tribute Fund
Qualification(s): Full-time students registered in any program offered by the College of Social and Applied Human Sciences with a minimum 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the following academic year.
Amount: 1 award of $2,000

Amina Kapadia Memorial Scholarship [I1093]

This scholarship was created and funded by the Kapadia Family and Department of Chemistry, in the memory of Ms. Amina Kapadia who died with her parents in a tragic house fire on February 14, 2017.

Donor(s): The Kapadia Family
Qualification(s): Student registered in the Biological and Pharmaceutical Chemistry major who completed CHEM*1040 in the previous academic year (fall/winter/summer).
Amount: 1 award of $1,000
Analytical Biochemistry Scholarship [10281]

Awarded to the students with the highest grade in BIOC*3570, Analytical Biochemistry, in each of the two course offerings in the previous calendar year. Eligible students must be continuing in a Major or Honours program administered by the Department of Molecular and Cellular Biology. No application is necessary.

Donor(s): Dr. F.J. Sharom and the Department of Molecular and Cellular Biology
Qualification(s): Students enrolled in the Biochemistry Honours program or Biochemistry Co-op program who have completed BIOC*3570.

Amount: 2 awards of $500

Analytical Toxicology Award [10465]

Application is not required.

Donor(s): Donor wishes anonymity
Qualification(s): Students registered in a toxicology major who achieves the highest grade in the course TOX*3300, Analytical Toxicology. Prize will be awarded at the Annual Toxicology Symposium.

Amount: 1 award of $400

Arvind Ravi Memorial Scholarship for Excellence in Mathematics [11125]

Established in memory of Arvind Ravi to promote Excellence in Mathematics. Selection will be based on past work experience in the area of crop protection or crop agronomics, future goals, and academic achievement. Apply by letter (no more than 2 pages) outlining work experience in the area of crop protection or crop agronomics and future career goals to the OAC Awards office (oacaward@uoguelph.ca) by May 15th. Please include our name, student ID number and the name of the award on your application.

Donor(s): Ravi & Raji Venkataraman
Qualification(s): Students registered in any major offered by the Department of Mathematics and Statistics who have completed at least 14.0 and 19.5 credits, with at least 5.0 MATH credits, and at least 1.5 credits at the 3000 level or above-including MATH*3200.

Amount: 1 award of $3,000

BASF Canada Scholarship in Crop Protection [10754]

Selection will be based on past work experience in the area of crop protection or crop agronomics, future goals, and academic achievement. Apply by letter (no more than 2 pages) outlining work experience in the area of crop protection or crop agronomics and future career goals to the OAC Awards office (oacaward@uoguelph.ca) by May 15th. Please include our name, student ID number and the name of the award on your application.

Donor(s): BASF Canada Inc. or BASF Canada
Qualification(s): OAC students registered in the B.Sc. (Agr) or B.Sc. programs who have completed a minimum 10.0 credits with a minimum 70% cumulative average.

Amount: 2 awards of $2,500

Bill Taylor Memorial Scholarship [10280]

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.

Donor(s): AMF Canada Ltd.
Qualification(s): Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or intercollegiate athletics.

Amount: 1 award of $900

Blackburn Scholarship [10404]

In commemoration of the 125th Anniversary of the Ontario Agricultural College, Dr. D.J. Blackburn, a retired faculty member of the former Rural Extension Studies program and former Director of the Associate Diploma Program has established this scholarship. Apply by letter, citing athletic contributions, to the O.A.C. Awards Committee (oacaward@uoguelph.ca) by May 15. Please include our name, student ID number and the name of the award on your application.

Donor(s): D.J. Blackburn
Qualification(s): O.A.C. degree or diploma student who has participated in intercollegiate athletics and maintained a minimum cumulative average of 70% while registered at Guelph. Athletic excellence and leadership will be used to determine the recipient. Students who have completed up to 3 years of study are eligible.

Amount: 1 award of $1,000

Braithwaite Business Scholarships [10827]

Named in honour of Professor Bill Braithwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15th with a resume and 500-word statement describing why business courses, in addition to their major, will benefit their future career. Shortlisted applicants may be invited for an interview with the LANG Awards Committee.

Donor(s): Anonymous
Qualification(s): Students registered in any degree program, with the exception of B.Comm., who have successfully completed 1.0 credits towards the Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150 Introduction to Canadian Business or students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) who have completed 1.0 credits towards the minor.

Amount: 10,500.00 (payable over 2 semesters)

Brian L. Walker Memorial Scholarship [10301]

The scholarship will be awarded on recommendation of the Department of Human Health and Nutritional Sciences based on academic achievement in six Nutritional Sciences courses. The scholarship is not tenable with the Dr. Hugh D. Branion Memorial Scholarship.

Donor(s): Brian Walker Memorial Scholarship Committee
Qualification(s): Student registered in B.Sc. Nutrition and Nutraceutical Sciences major who have completed a minimum of 17.5 credits.

Amount: 1 award of $1,000

Bridge Builder Scholarship [11050]

The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Apply to Student Financial Services by May 15th with one page outlining your volunteer activities that lead to social connections, breaking down barriers, and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people through one or more of the following: Civic engagement by facilitating community engagement, social integration and volunteerism to support inclusion for immigrant and ethno-cultural communities; Social connections by promoting social connections and employment networking, including programs that reduce barriers and increase support for vulnerable groups; Education and empowerment by promoting intercultural understanding and decision-making. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.

Donor(s): Muslim Society of Guelph
Qualification(s): Students registered in any program who, through volunteer activities in the local community, have demonstrated a passion and commitment for building bridges in one or more of the following ways: facilitating social connections; breaking down barriers; and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people.

Amount: 1 award of $1,000

Bruce Holub Prize [C0973]

Created in honour of University Professor Emeritus, Dr. Bruce Holub. Students registered in the Nutrition and Nutraceutical Sciences (NANS) major in the Department of Human Health and Nutritional Sciences. Selection will be based on who has achieved the highest grade across the courses listed below.

Donor(s): Dr. Bruce Holub
Qualification(s): Students who are graduating in June, or who have graduated in the previous 2 convocations with a major in Nutrition and Nutraceutical Sciences (NANS) and who have completed HK*4360 or HK*4371/2, or HK*4510 or HK*4511/2.

Amount: 1 award of $1,000

Bruce Sells Medal of Academic Excellence [C0402]

In honour of Bruce Sells, the Dean of the College of Biological Science, 1983-1995, a silver medal is presented. Application is not required.

Donor(s): Dr. Bruce Sells and friends
Qualification(s): Presented to the student who has graduated at the completion of the Winter semester, or during the previous Fall or Spring semester, with the highest cumulative average in the Honours Biological Sciences, B.Sc. degree program.

Amount: 1 award of a Silver medal
Bruce W. Minshall Memorial Scholarship [10450]
Provided by Dr. W.H. Minshall (O.A.C.’33) in memory of his son Bruce, a graduate of O.A.C. in 1970. Apply by May 15 to the OAC Awards office (oaaward@uoguelph.ca) by letter listing courses taken in the area of crop protection. Awarded in the fall semester. Please include our name, student ID number and the name of your application.

Donor(s): O.A.C. Alumni Foundation on behalf of Dr. W.H. Minshall
Qualification(s): Students registered in any program offered by the College of Social Science whose average will be selected. Apply by May 15 to the OAC Awards committee (oaaward@uoguelph.ca) including a one page letter of application describing the greatest improvement in academic standing since entering the program.

Amount: 1 award of $1,000

Bryant Family Research Prize [10537]
This scholarship was established through the generosity of W. Keith Bryant, O.A.C. ’57, in honour of the contributions to the University made by his grandfather, Robert Bryant, his father, Leonard R. Bryant and his uncle, H. William Bryant. Robert Bryant was a Stockkeeper in the Chemistry Department from the 1920’s to the 1940’s. Leonard R. Bryant, Professor of Chemistry and Dairy Chemist, served the University from 1927 to 1958. H. William Bryant, O.A.C. ’31, was employed by the Apiculture Department from 1931 to 1934. The Faculty Coordinator for IBIO*4500 will select the two students who are judged to have the two best final written reports in IBIO*4500 (Research in Integrative Biology) by the grade submission deadline for the course, as per the assessment procedures in the Course Outline. No application is required.

Donor(s): Dr. W. Keith Bryant and Mrs. Martha J. Bryant
Qualification(s): Students registered in the undergraduate research project course, IBIO*4500 (Fall or Winter).
Amount: 2 awards of $450

Bryant Family Thesis Research Prize [10057]
This scholarship was established through the generosity of W. Keith Bryant, O.A.C. ’57, in honour of the contributions to the University made by his grandfather, Robert Bryant, his father, Leonard R. Bryant and his uncle, H. William Bryant. Robert Bryant was a Stockkeeper in the Chemistry Department from the 1920’s to the 1940’s. Leonard R. Bryant, Professor of Chemistry and Dairy Chemist, served the University from 1927 to 1958. H. William Bryant, O.A.C. ’31, was employed by the Apiculture Department from 1931 to 1934. All applicants must submit copies of their final written report to the Faculty Coordinator for IBIO*4522 by the deadline listed in the Course Outline. The recipient will be judged to have the best final written report for IBIO*4522, Thesis in Integrative Biology, based on the assessment procedures in the Course Outline, and must meet a minimum. No application is required.

Donor(s): Dr. W. Keith Bryant and Mrs. Martha J. Bryant
Qualification(s): Students registered in the research project course, IBIO*4522 (Thesis in Integrative Biology).
Amount: 1 award of $700

Canadian Agri-Marketing Association (Ontario) Scholarship [10541]
Selection will be based on a combination of academic achievement and greatest demonstrated interest in agri-marketing. Apply to the OAC Awards Office by May 15 with a summary of participation in the CAMA Student Chapter and/or involvement in agri-marketing initiatives as well as a letter of recommendation from a faculty member. This award may only be held once.

Donor(s): Canadian Agri-Marketing Association (Ontario)
Qualification(s): Students registered in any program offered by OAC who have completed a minimum of 10.0 credits with a minimum 70% cumulative average and are active members of the CAMA Student Chapter and/or involved in agri-marketing initiatives. Apply to OAC Awards office (oaaward@uoguelph.ca)
Amount: 1 award of $1,000

CBS Student Council Academic Achievement Scholarship [10744]
The CBS Student Council provides this scholarship to recognize and further encourage the academic and extracurricular achievements of CBS students. Selection will be based on academic achievement, extracurricular activities and personal essay. Apply to the CBS Student Council (CBS Student Council) by May 15 with a completed application form listing academic awards, scholarships, research experience, publications and extra-curricular activities along with a 500 word personal essay outlining how the academic achievements and extra-curricular activities contribute to academic and personal goals. Award may be held only once.

Donor(s): CBS Student Council
Qualification(s): Full time students registered in a major offered by the College of Biological Science who have completed at least 10.0 credits with a minimum cumulative average of 85%
Amount: 1 award of $2,500

CBS Student Council Extracurricular Achievement Scholarship [10745]
The CBS Student Council provides this scholarship to recognize and further encourage the academic and extracurricular achievements of CBS students. Selection will be based on breadth of extra-curricular activities, academic achievement and personal essay. Apply to the CBS Student Council (CBS Student Council) by May 15 with a completed application form listing extra-curricular activities, academic awards, scholarships, research experience and publications along with a 500 word personal essay outlining how the extra-curricular activities and academic achievements contribute to academic and personal goals. Award may be held only once.

Donor(s): CBS Student Council
Qualification(s): Full time students registered in a major offered by the College of Biological Science who have completed at least 10.0 credits with a minimum cumulative average of 80%
Amount: 1 award of $2,500

CBSAA Student Scholarship [10885]
Established to recognize academic excellence and extracurricular involvement. Selection will be based on extracurricular involvement and demonstrated strong leadership at the University of Guelph, with a preference for students who are involved in college clubs and activities. This scholarship is not tenable with the CBS Student Council Extracurricular Achievement Scholarship. Apply to CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) including a one page letter of application describing extracurricular involvement on campus by May 15.

Donor(s): CBS Alumni Association (CBSAA)
Qualification(s): Students registered in any major offered by CBS who have completed between 4.0 and 10.0 credits with a minimum 80% cumulative average. Apply to CBS Student Council (CBS Student Council) by May 15
Amount: 1 award of $1,000
IX. Scholarships and Other Awards, Bachelor of Science

CEPS-SC Student Leader Scholarship [I0938]
Established to recognize the student who demonstrates the most significant contributions to enhancing and promoting the physical and engineering sciences at the University of Guelph, through volunteer leadership roles. Apply to the CEPS Awards Committee (cepsada@uoguelph.ca) by May 15 with a one page letter outlining volunteer/leadership contributions and a reference letter indicating what contributions they made to promoting and enhancing physical and engineering sciences.

Donor(s): College of Engineering and Physical Sciences Student Council
Qualification(s): Students registered in any program offered by the College of Engineering and Physical Sciences who have completed a minimum of 4.0 credits with demonstrated involvement in college-related volunteer/leadership activities.b3527
Amount: 2 awards of $1,000

CFRU Volunteer Scholarship [I0215]
The award is presented to the student who has made the most significant contribution to the operation and goals of CFRU. Apply to Student Financial Services by May 15 with a letter describing the contributions made as a volunteer with CFRU and how those contributions have supported the operation and furthered the goals of CFRU.

Donor(s): CFRU Alumni
Qualification(s): Students registered in any program with a minimum cumulative average of 70% who have volunteered at CFRU for at least one year.
Amount: 1 award of $1,000

Chair’s Prize in Human Health and Nutritional Sciences [C0555]
Established by the Department of Human Health and Nutritional Sciences. These awards are presented to the student with the highest cumulative average in each of Human Kinetics, Biomedical Sciences, and Nutrition and Nutraceutical Science. Application is not required. Student recognized at the June convocation.

Donor(s): Human Health and Nutritional Science Department
Qualification(s): Full-time students who have completed the B.Sc. Degree program in Human Kinetics, Biomedical Science, and Nutrition and Nutraceutical Science within the most recently completed academic year.
Amount: 3 awards of $500

Charles McGowan Memorial Prize [C0187]
Established in memory of the late Lieutenant Charles McGowan. Application is not required.

Donor(s): Charles McGowan Memorial Fund
Qualification(s): Outstanding graduating student in an O.A.C. degree program.
Amount: 1 award of $200

Chemical Institute of Canada (CIC) Silver Medal in Chemistry [I0646]
A silver medal is presented to the student with the highest cumulative average in each of the Honours Chemistry, Biological Chemistry and Applied Pharmaceutical Chemistry programs. Application is not required.

Donor(s): Chemical Institute of Canada
Qualification(s): Students registered in the Honours Chemistry, Biological Chemistry or Applied Pharmaceutical Chemistry programs who have completed a minimum of 15.0 credits during the previous calendar year.
Amount: 3 Silver medals

Chemical Institute of Canada Prize (CIC) Silver Medal in Biochemistry [I0056]
Application is not required.

Donor(s): Chemical Institute of Canada
Qualification(s): Student enrolled in the Biochemistry Honours program or Biochemistry Co-op program who have completed a minimum of 15.0 credits with the highest cumulative average.
Amount: 1 Silver medal

Chemistry Club Prize for Chemistry Promotion [I0495]
Awarded to the student who has made outstanding efforts to promote chemistry within the university or the community. Applicants should submit a one-page summary outlining their efforts to promote the disciplines of chemistry within the university, or the community to the Chair of the Department of Chemistry Undergraduate Awards Committee by February 1st.

Donor(s): The Chemistry Club
Qualification(s): Students registered in any degree who are members of the Chemistry Club.
Amount: 1 award of $200

Christina Victoria Kenny Memorial Scholarship [I1018]
The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.

Donor(s): Family and Friends of Vikki Kenny
Qualification(s): Students registered in any degree program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.
Amount: 1 award of $1,000

Class of ‘51 O.A.C. Leadership Prizes [C0063]
Established by Year ‘51 O.A.C., on the occasion of its 45th anniversary. Selection will be based on significant demonstrated leadership in College and/or University extracurricular activities. Apply to the OAC Awards office (oacaward@uoguelph.ca) by April 1 with a letter outlining your demonstrated leadership in College and/or University extracurricular activities. Please include our name, student ID number and the name of the award on your application.

Donor(s): Year ‘51 O.A.C.
Qualification(s): Students who have graduated or are graduating in the previous Fall or Winter semesters from any degree or associate diploma program in the OAC, Guelph campus.
Amount: 5 awards of $3,000

Class of ‘67 O.A.C. Centennial Scholarship [I0067]
Apply by May 15 to the OAC Awards office (oacaward@uoguelph.ca) with a letter outlining participation in extracurricular activities in all branches of college life. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

Donor(s): Class of O.A.C. ’67
Qualification(s): Student majoring in an O.A.C. department who through activity in all branches of college life as well as scholastic achievement has made an outstanding contribution to the University.
Amount: 2 awards of $2,000

Class of 1970 Scholarship [I0424]
Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.

Donor(s): Class of 1970: 25th Reunion Gift
Qualification(s): Outstanding student in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Deans’ Honours List.
Amount: 1 award of $1,400

Class of Mac 1964 Scholarship [I1033]
Apply to the CSAHS Awards Committee by May 15th with a one page letter outlining your experiential learning opportunity and the impact the experience had on your academic studies. Selection will be based on the student who best describes how their experiential learning positively impacted their academic studies. Preference will be given to students who best explain how their experiential learning has directly benefited their area of study within CSAHS; highest cumulative average will be used in the case of a tie.

Donor(s): The Class of Mac 1964
Qualification(s): Students registered in the College of Social and Applied Human Sciences with a minimum cumulative average of 75% and a minimum of 10.0 credits who have participated in experiential learning including curriculum-embedded experiential learning, placements, field courses and international travel opportunities within the last 3 semesters.
Amount: 1 award of $1,500

Clayton and Dorothy Switzer Scholarships [I0276]
Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter outlining how you have demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

Donor(s): Clayton and Dorothy Switzer
Qualification(s): Students registered in a degree program offered by O.A.C. with a minimum of 10.0 credits completed, at least a 70% cumulative average and has demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal.
Amount: 1 award of $2,500
IX. Scholarships and Other Awards, Bachelor of Science

College of Biological Science Gold Medalist [C0072]
Presented to the College of Biological Science nominee for the Winegard Medal. The award will be presented at the time of the Spring Convocation. Application is not required.

**Donor(s):** An anonymous donor  
**Qualification(s):** The recipient is selected by the Awards Committee of the College of Biological Science.  
**Amount:** 1 award of $500, 1 Gold Medal

College of Engineering and Physical Sciences Graduation Prize [C0075]
The winner will be selected in May from all students who have completed the program in the previous twelve months. Application is not required. One award of $1000 and a commemorative plaque.

**Donor(s):** College of Engineering and Physical Sciences  
**Qualification(s):** Students who are graduating in June, or who have graduated in the previous Winter or Fall convocations with the highest cumulative average from an honours program offered by the College of Engineering & Physical Sciences.  
**Amount:** 1 award of $1,000, 1 Commemorative plaque

Collins Barrow Scholarship [I0040]
Offered by Collins Barrow, a national firm of Chartered Professional Accountants. Selection will be based on the student who has achieved the highest grade in the course ACCT*3330, Intermediate Financial Accounting, in the past academic year. In the event of a tie, the award will go to the student with the highest cumulative average. Application is not required.

**Donor(s):** Collins Barrow - Wellington Dufferin District  
**Qualification(s):** Students who have successfully completed the course ACCT*3330, Intermediate Accounting.  
**Amount:** 1 award of $1,000

Copernicus Scholarship in Physics [I0081]
The awards will be made to the top 3 highest combined averages in PHYS*2240 and PHYS*2330. Application is not required.

**Donor(s):** Alumni & Friends to the Department of Physics  
**Qualification(s):** Students registered in a major offered by the Department of Physics with a minimum 80% average, and who have completed PHYS*2240 and PHYS*2330 in the previous academic semester.  
**Amount:** 3 awards of $1,500

CSAHS SA Student Leader Scholarship [I0864]
Selection will be based on contributions to college-related activities. Apply to the CSAHS Awards Committee by May 15 with a one page letter outlining volunteer experience within the college.

**Donor(s):** CSAHS Student Alliance  
**Qualification(s):** Full-time students registered in any program offered by the College of Social and Applied Human Sciences who have completed a minimum of 8.0 credits and can demonstrate involvement in college-related volunteer activities.  
**Amount:** 1 award of $1,000

CSAHS Student Volunteer Scholarship [I0482]
Inspired by Theresa Firestone, FACS ’78, and funded by the Harshman Fellowships Society and Pfizer Canada Inc. Students may apply on their own or be recommended by other students, faculty members or administrators from non-profit organizations. Apply to the CSAHS Dean's Office with two letters of recommendation, at least one of which should be from an individual who can speak to his/her volunteerism and a summary letter outlining the student’s volunteer experience and what has been gained or learned from this experience that has enhanced his/her personal growth and/or career goals by May 15.

**Donor(s):** Harshman Fellowship Society and Pfizer Canada Inc.  
**Qualification(s):** Full-time undergraduate students in any degree program offered by the College of Social and Applied Human Sciences and have completed at least 15 course credits with a minimum cumulative 70% average.  
**Amount:** 1 award of $500 plus an equal amount to the charitable organization of the recipient's choice

Dairy Challenge Prize [I0811]
Supported by The Madsen Dairy Cattle Research Fund, the Dairy Challenge Prize will be awarded to students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge. No application is required.

**Donor(s):** Madsen Dairy Cattle Research Fund  
**Qualification(s):** Students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge.  
**Amount:** several awards up to $2000

David F. Boyes Apiculture Scholarship [I0031]
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application is not required.

**Donor(s):** The Apiculture Club  
**Qualification(s):** Student registered in the Fall semester who achieves high academic standing in Introductory Apiculture (ENVB*2210) in the previous year, demonstrates an interest in apiculture and who has participated in extracurricular activities.  
**Amount:** 1 award of $200

Deans' Scholarships [I0323]
This award was established by the Board of Governors in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.

**Donor(s):** Board of Governors  
**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.  
**Amount:** 150 awards of $2,000

Dixon More Mathematical Science Scholarship [I0506]
This scholarship is named in honour of Professor Dixon More, for his long-term and substantial contributions to the Department of Mathematics and Statistics. The recipients will be selected on the basis of a highest cumulative average in a minimum of 4.0 credits from semesters 5 and 6. A student may be considered for this award once only. This award is not tenable with the R.C. Moffatt Memorial Scholarship in Mathematical Science (I0536). Application is not required.

**Donor(s):** Professor C. Dixon More  
**Qualification(s):** Students who have completed a minimum of 14.0 credits, but no more than 19.5 credits and are registered in a major offered by the Department of Mathematics & Statistics.  
**Amount:** 2 awards of $1,000

Don Posterski Memorial Travel Grant [T1105]
Established in memory of Don Posterski - a trusted advisor and friend to the Barrett Family Foundation. This travel grant recognizes Don Posterski's role and leadership in helping establish the sustainability partnership between the University and The Barrett Family Foundation. Mr. Posterski was a national Christian leader and had a distinguished career at World Vision Canada.

**Donor(s):** Alumni Affairs & Development - University of Guelph  
**Qualification(s):** Students registered in International Development (CSAHS) who have completed at least 10.0 credits with a minimum cumulative average of 70% and who demonstrates the desire and aptitude to help build capacity and address social issues in international communities and are participating in any course related international travel. Apply to CSAHS Awards committee with a letter outlining proposed travel plans and academic purpose accompanied by a letter of support from a faculty member or student in and an overall travel budget.  
**Amount:** 1 award of $1,000

Donald I. Broadfoot Scholarship [I0994]
This scholarship was created in honour of Donald Broadfoot who graduated from OAC in 1950. He worked for Hy-Line Poultry (a division of Pioneer Corn Company) in the United States and Canada from 1950-1974 where he conducted disease and genetic research, and during that time did a lot of work which led up to effective treatments for various diseases in poultry. Apply by May 15 to the OAC Awards Committee (oacaward@uoguelph.ca) with a letter (no more than 2 pages) outlining your interest in poultry science. Please include relevant work experience; relevant volunteer experience and/or relevant research projects that demonstrate this interest. Please include the name of the award and the award ID number in the subject line of your email as well as on your application. Please include your student number on your application. Selection will be based on the strongest demonstrated interest measured by; work experience; volunteer experience and/or projects. Students may only receive this award once.

**Donor(s):** Doug Broadfoot  
**Qualification(s):** Students registered in any program in OAC who have completed a minimum of 10.0 credits at the time of application and who demonstrate an interest in poultry science.  
**Amount:** 1 award of $500

Last Revision: July 4, 2019
### Dr. James (Jim) Atkinson Scholarship [I1025]

This award has been created through the generous contributions of many alumni and friends to recognize Dr. James (Jim) Atkinson’s influence at Guelph. As coach for over thirty years on both the men’s and women’s teams, as well as a respected faculty in the departments of Animal and Poultry Science, Jim has had an impact on and off the field. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

**Donor(s):** Alumni and Friends of Dr. James (Jim) Atkinson  
**Qualification(s):** One male rugby player and one female rugby player who is registered in any undergraduate program and who has achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student enrolled in the Ontario Agricultural College.

**Amount:** 2 awards of $1,000

### Dr. Ken Fisher Prize for History and Embryology [C2175]

Established in honour of Dr. Ken Fisher, a respected faculty member in the Department of Biomedical Sciences from 1974 to 2004. The recipient will be the student with the highest cumulative average in Biomedical History (BIOM*4070) and Biomedical Embryology (BIOM*4090). Application not required.

**Donor(s):** The Department of Biomedical Sciences  
**Qualification(s):** Students who have graduated from the Bachelor of Science program with a major in Bio-Medical Science in the previous fall and winter semesters or will graduate with this major in the summer semester.

**Amount:** 1 award of $200

### Dr. Peter Eyre Pharmacology and Toxicology Prize [C2176]

Established in honour of Dr. Peter Eyre, Chair of the Department of Biomedical Sciences from 1979-1985 and Associate Director, Canadian Centre for Toxicology. The recipient will be the student with the highest cumulative average in the courses Principles of Pharmacology and Toxicology (BIOM*3090) and Pharmacology (BIOM*4090).

**Donor(s):** The Department of Biomedical Sciences  
**Qualification(s):** Students who have graduated from the Bachelor of Science program with a major in Bio-Medical Science in the previous fall and winter semesters or will graduate with this major in the summer semester.

**Amount:** 1 award of $200

### Dr. R. J. Hilton Memorial Scholarship [I0678]

Established to honour the accomplishments of Dr. Hilton as the Chair, Horticulture Science, University of Guelph, first Director of the Arboretum and President/Chair of the Royal Botanical Gardens. Selection will be based on the highest cumulative average, demonstrated involvement in horticulture activities and involvement in academic club activities. Summer related work experience will also be considered. Preference will be given to students registered in B.Sc.(Agr.) CHATS and B.Sc. Plant Science. Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter outlining the plant agriculture course(s) and /or involvement in horticultural activities and summer related work experience or information about involvement in academic club activities. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** Robert E. Hilton  
**Qualification(s):** Students registered in any program offered by O.A.C. who have completed a minimum 8.0 credits with a minimum 70% cumulative average.

**Amount:** 1 award of $1,000

### Dr. A.B. Keates Biochemistry Scholarship [I0667]

Established by Professor Robert A.B. Keates, faculty member since 1977 and awarded to the student with the highest cumulative average in the required Biochemistry courses. This award may be held only once. Application is not required.

**Donor(s):** Dr. Robert A.B. Keates  
**Qualification(s):** Students registered in a Biochemistry major offered by the Department of Molecular and Cellular Biology who have completed between 15.0 and 19.75 credits and have a minimum 80% cumulative average in the required Biochemistry courses.

**Amount:** 1 award of $1,000

---

### Other Scholarships

#### Douglas M. Robinson Memorial Scholarship for Excellence in Communications [I0409]

Established in memory of Douglas Robinson, OAC’53. Doug spent his career promoting and creating awareness of agriculture. This scholarship recognizes his leadership in agriculture communications and his service to both the University and agricultural communities. Apply with a resume to the OAC Awards Committee (oacaward@uoguelph.ca) by May 15. Selection will be based on demonstrated leadership promoting and creating awareness of agriculture through extracurricular activity including student competitions, university clubs, events and student government.

**Donor(s):** Mrs Marilyn Robinson Murray  
**Qualification(s):** Students registered in any degree program offered by the Ontario Agriculture College with a minimum of 10.0 credits.

**Amount:** 1 award of $1,000

#### Dr. and Mrs. Benjamin Lu Scholarship [I0946]

Established by Professor Emeritus Dr. Benjamin Lu. Students majoring in Molecular Biology and Genetics who have successfully completed MBG*2040 Foundations in Molecular Biology and Genetics in the previous academic year.

**Donor(s):** Dr. Benjamin Lu  
**Qualification(s):** Selection will be based on highest grade in MBG*2040 Foundations in Molecular Biology and Genetics.

**Amount:** 1 award of $2,000

#### Dr. And Mrs. Kenneth F Gregory Scholarship [I0817]

The scholarships will be awarded on the basis of significant volunteer participation. In the event of a tie, the award will go to the student with the highest cumulative average. Apply to the main office, Molecular and Cellular Biology (SCIE Room 4478) by May 15 with a letter outlining volunteer participation.

**Donor(s):** Dr. And Mrs. Kenneth F. Gregory  
**Qualification(s):** Students enrolled in any major offered by the Department of Molecular and Cellular Biology of the College of Biological Science with a minimum cumulative average of 80% who have demonstrated volunteer participation.

**Amount:** 2 awards of $1,000

#### Dr. Caesar V. Senoff Memorial Scholarship for Excellence in Chemistry [I0517]

The Senoff family and the College of Engineering and Physical Sciences, together with the University of Guelph Faculty Association and friends, have established this scholarship in memory of Dr. Caesar V. Senoff. Dr. Senoff discovered the first dinitrogen complex while completing his PhD at the University of Toronto, opening up a new field of chemistry. A valued member of the University of Guelph faculty from 1968 to 1996, his positive influence continues through his students and colleagues. This scholarship will be given annually to the student with the highest cumulative average. Application is not required.

**Donor(s):** Senoff family and the College of Engineering and Physical Sciences, together with the University of Guelph Faculty Association and friends  
**Qualification(s):** Students registered in a major offered by the Department of Chemistry who have completed between 7.5 and 9.75 credits and a minimum cumulative average of 80%.

**Amount:** 1 award of $500

#### Dr. David Porter Memorial Prize in Physiology [C2174]

Established in memory of Dr. David Porter, Chair of the Department from 1986 until his untimely death in 1994. Dr. Porter was an outstanding contributor to our knowledge of the physiology of the hormone relaxin. Students with a minimum of 80.0 % in Mammalian Physiology BIOM*3200 and the highest combined cumulative average in any two of the courses: Endocrine Physiology BIOM*4030, Biomedical Aspects of Aging BIOM*4050, and/or Cardiology (BIOM*4180). Application not required.

**Donor(s):** The Department of Biomedical Sciences  
**Qualification(s):** Students who have graduated from the Bachelor of Science program with a major in Bio-Medical Science in the previous fall and winter semesters or will graduate with this major in the summer semester.

**Amount:** 1 award of $200

#### Dr. Erika Gaertner Scholarship in Botany [I0880]

Established to encourage young scientists passionate about botany. Selection will be based on the highest combined average of any two of the BOT courses. In the event of a tie, the three students with the highest average in the last academic semester will be selected. No application required.

**Donor(s):** Dr. Erika Gaertner, BSA 1944  
**Qualification(s):** Students registered in the Biodiversity major of the BSc program in the College of Biological Science who have completed between 14.0 and 17.0 credits.

**Amount:** 3 awards of $1,000
IX. Scholarships and Other Awards, Bachelor of Science

Dr. R.M.W. Stevenson Microbiology Scholarship [I0970]
Established by Professor Roselynn Stevenson to recognize a senior student in Microbiology. Selection will be based on highest cumulative average in all 2000 and 3000 level microbiology and biochemistry courses required for the major in Microbiology. No application is required.

**Donor(s):** Dr. Roselynn M.W. Stevenson  
**Qualification(s):** Students registered in the Microbiology major of the Bachelor of Science program who have completed a minimum of 15.0 credits, including all the 2000 and 3000 level microbiology and biochemistry courses required for the major.

**Amount:** 1 award of $1,500

Dr. Ralph and Joanne Watt Scholarship [I1080]
Apply to the OAC Awards Committee (oacaward@uoguelph.ca) by May 15 with a resume and a letter (no more than two page) outlining your career interests and your employment and/or extracurricular activities that demonstrate your interest in becoming an equine veterinarian and your involvement in agricultural activities. Please include the Award Name and ID in the subject line of your email and on all pieces of your application. Please also include your student ID on your application.

**Donor(s):** Sandy Watt  
**Qualification(s):** Students registered in the Bachelor of Science in Agriculture with a major in Animal Science, or Honours Agriculture; the Bachelor of Science with a major in Animal Biology; or the Bachelor of Bio-Resource Management with a major in Equine Management who have completed a minimum of 8.0 credits who aspire to become an equine veterinarian are eligible. Selection will be based on highest cumulative average. Preference will be given to students who aspire to becoming an equine veterinarian and who actively participate in agricultural activities.

**Amount:** 1 award of $1,000

E.B. MacNaughton Convocation Prize [C0171]
Established by the College of Engineering and Physical Sciences to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application is not required. Students who have graduated from an honours program offered by the College of Engineering & Physical Sciences in the previous fall or winter semesters or will graduate in the upcoming summer semester.

**Donor(s):** The College of Engineering and Physical Sciences  
**Qualification(s):** The College of Engineering and Physical Sciences nominee for the Winegard Medal.

**Amount:** 1 award of $1,000

Egelstaff Scholarship [I0397]
In honour of University Professor Emeritus and former Chair of the Department of Physics, Peter A. Egelstaff. Application is not required.

**Donor(s):** Department of Physics  
**Qualification(s):** Student who has completed 12.5 course credits, is currently registered in one of the majors in Physics and has a high cumulative average (of at least 80%) in the required Physics courses normally taken in Years 2 & 3 of the major.

**Amount:** 1 award of $750

Emmanuel & Kalliope Salamalekis Scholarship [I0987]
Dr. Tony Vannelli, Dean of the College of Physical & Engineering Science from 2007 to 2016, and his wife, Voula, established this award in honour of Voula’s parents, Emmanuel & Kalliope Salamalekis. Selection will be based on high cumulative average and demonstrated engagement in the community, preferably in a leadership role supported by two letters of reference from individuals who or organizations that have knowledge of and can attest to that experience. Apply to the College of Physical & Engineering Science Awards Committee with a letter of application and two supporting reference letters from individuals or organizations attesting to community engagement experience by May 15th. This award is non-transferable with the Michele & Maria Vannelli Scholarship (I0988).

**Donor(s):** Dr. Anthony Vannelli and Voula Vannelli  
**Qualification(s):** Students registered in any program offered by the College of Physical & Engineering Science who have completed a minimum of 5.0 credits and have demonstrated engagement in the community, preferably in a leadership role.

**Amount:** 1 award of $1,000

Farzom Rad Memorial Scholarship [I1045]
This award was established in 2017 in loving memory of Farzom Rad, a first-year Marine and Freshwater Biology major at the University of Guelph. Selection is based on the highest cumulative average. This award can only be held once and cannot be held at the same time with the Keith Ronald Undergraduate Scholarship (I4547). Application is not required.

**Donor(s):** Farzom Rad’s Family  
**Qualification(s):** Students registered in the Marine and Freshwater Biology major who have completed a minimum of 2.5 credits, but no more than 3.0 credits.

**Amount:** 1 award of $1,000

Floyd Roadhouse Prize in Analytical Chemistry [I0247]
Awarded to the student with the highest grade in CHEM*2400 Analytical Chemistry I in the previous calendar year. In the event of a tie, laboratory performance will be considered. Presented in the Winter semester. Application is not required.

**Donor(s):** Professor E.B.B. Roadhouse, colleagues, students and friends  
**Qualification(s):** Students registered in an honours major program offered by the Department of Chemistry and who have completed CHEM*2400, Analytical Chemistry.

**Amount:** 1 award of $500

Fourth Year Nanoscience Scholarship [I0751]
The scholarships will be awarded to the students with the highest cumulative average.

No application necessary.

**Donor(s):** Dean’s Office College of Physical and Engineering Science  
**Qualification(s):** B.Sc. students registered in the Nanoscience major who have completed at least 17.50 credits with a minimum cumulative average of 80%.

**Amount:** 2 awards of $1,000

Frances M. Stretton Scholarship [I0768]
Selection will be based on significant prior contributions to and experience in community-based service. Preference will be given to students working on a project related to nutrition, food safety or sustainability within the College. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

**Donor(s):** Mrs. Frances M. Stretton  
**Qualification(s):** Students registered full-time in any program offered by the College of Social and Applied Human Sciences with a minimum of 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the following academic year.

**Amount:** 1 award of $5,000

Frances Sharom Biochemistry Scholarship [I0884]
Established to recognize the top third year biochemistry student. No application required.

**Donor(s):** Dr. Frances J. Sharom  
**Qualification(s):** The student registered in the Biochemistry major in the Bachelor of Science who is the recipient of the Chemical Institute of Canada (CIC) Silver Medal in Biochemistry.

**Amount:** 1 award of $1,000

Francis E. Chase Memorial Scholarship [I0655]
Awarded in the Fall semester. The award will be made on the basis of academic standing, leadership in extracurricular activities. Apply to the OAC AwardsOffice (oacaward@uoguelph.ca) by May 15th, with a letter of no more than 2 pages outlining leadership in extracurricular activities. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** Mrs. Jane M. Chase  
**Qualification(s):** Student who has completed semesters 4 or 6 of the B.Sc. program in majoring in Food Science.

**Amount:** 1 award of $300
Frank and Gertrude Hurnik Scholarship [I0455]
Provided by Dr. Frank Hurnik, Professor Emeritus, and faculty member in Animal Biosciences from 1971 to 1997. Dr. Hurnik initiated work in behavioral studies and animal welfare at Guelph, developed the first course in Animal Welfare, and was co-founder and editor of the Journal of Agricultural and Environmental Ethics. Apply by letter to the OAC Awards Office (oacaward@uoguelph.ca) by May 15 outlining details of the project or meeting. The award will be given to the student who has the best presentation, paper or project. Preference is given to Graduate students. Please include our name, student ID number and the name of the award on your application.

Donor(s): Dr. Frank Hurnik
Qualification(s): Students registered in the O.A.C. who are associated with the department of Animal & Poultry Science and who undertake a project or attend a conference/scientific meeting or publish a paper in animal welfare or agricultural ethics may apply. A minimum of an "A" standing for in the last two semesters is required.

Amount: 1 award of $1,000

Fred Ramprashad Scholarship [I0474]
Established through the direction of the College of Biological Science alumni to honour Professor Fred Ramprashad for his commitment to the college and to the athletic programs at Guelph. The award will recognize the student that best demonstrates the combination of academic excellence and participation in intercollegiate athletics. Application is not required.

Donor(s): The C.B.S. Alumni, 'Annual Donation'
Qualification(s): C.B.S. student with a high academic standing who has been nominated by the Department of Athletics Award Committee. The recipient should have achieved a minimum of 80% in the previous Winter and Fall semesters, which the CIAU recognizes as Academic-All-Canadian status, and made an exemplary contribution to the team(s).

Amount: 1 award of $750, and a Medal

Gary Partlow Prize for Leadership and Academic Excellence [C1040]
Established in honour of Dr. Gary Partlow, who was a faculty member in the Department of Biomedical Sciences from 1976 to 2005. He was a strong advocate of the Bio-Medical Science Major, and for years was the counselor for students in the Bio-Medical Science Major, dedicating hours to the academic success of these students. This award was established by his friends in recognition of the many years of service to the major and his belief in the quality and potential of each of its students. Apply with a one-page nominating letter with description of student’s involvement. The nominator may be anyone familiar with the student’s contributions (students may self-nominate). Student must satisfy acceptance of nomination and submit two (2) letters of reference from individuals familiar with the nominee’s contribution to the BMSSA or other community organization, including one letter from a peer of the nominee, as well as a resume/CV to accompany the nomination. Transcripts will be obtained by the Department. Nominating letter, supporting letters and resume/CV are to be submitted to Kim Best at kbestb@uoguelph.ca by March 31.

Donor(s): Department of Biomedical Sciences
Qualification(s): Students in their final year of Biomedical Science Major and have applied to graduate or have graduated from the previous two convocations, who have played a significant leadership role in the Bio-medical Science Student Association (BMSSA) and the wider community while maintaining academic excellence with a cumulative average of 80% or higher.

Amount: 1 award of $500

Gaskin Medal in Marine and Freshwater Biology [C0432]
Established to honour Dr. David Gaskin, professor in the former Department of Zoology from 1968 - 1998, for his contribution to this field. Application is not required. One award of a medal and a maximum of $1000.

Donor(s): Department of Integrative Biology
Qualification(s): The student who graduates at the completion of the Winter semester, or during the previous Fall or Spring semesters with the highest cumulative average in the Department of Integrative Biology's Marine and Freshwater Biology major.

Amount: 1 award of $1,000, and a Medal

George A. Farley Scholarship [I0099]
Established in memory of George A. Farley, a chemistry graduate of the Class O.A.C. ’33. This scholarship is presented to the student that demonstrates proficiency and academic achievement as evidenced by work term reports, work term assessments and course grades. Application is not required.

Donor(s): James M. Farley
Qualification(s): Student enrolled in a Co-op program administered by the Department of Chemistry with a cumulative average of at least 80% and who has completed their second work term within the preceding calendar year.

Amount: 1 award of $500

George A. Gray O.A.C. ’51 Varsity Scholarships [I0487]
Established in memory of George Gray, O.A.C.’51, a Guelph football lineman and a great player of the game. Recipients will be selected based on demonstrated athletic and leadership qualities. Coaches will nominate students to the Athletics Awards Committee. Preference will be given to members of the varsity football team. Application is not required. Awarded in the fall semester.

Donor(s): Mrs. George A. Gray
Qualification(s): In-course student-athlete who is a current member of a varsity team and has achieved a minimum 70% average in the previous academic year.

Amount: 2 awards of $1,250

George I. Christie Prize [C0347]
The late George I. Christie, president of O.A.C. from 1928 to 1945, established a trust fund to provide this annual scholarship for graduate work. Apply to the OAC Awards Office (oacaward@uoguelph.ca) by April 1 with a letter outlining your plans for after graduation. Please include our name, student ID number and the name of the award on your application.

Donor(s): Trust Fund (late President George I. Christie)
Qualification(s): Awarded to a student graduating with high standing in an Animal Biosciences course who proposes to pursue graduate studies in animal science at any institution of his/her choice.

Amount: 1 award of $750

GIBCO/BRL Microbiology Research Excellence Prize [C0297]
This award is funded by an endowment provided by the GIBCO/BRL Enzyme Freezer Program. Nominations from Faculty supervisors should be submitted to the Chair of the Department of Molecular and Cellular Biology between April 15 and April 30 of each year.

Donor(s): Department of Molecular and Cellular Biology and the GIBCO/BRL Enzyme Freezer Program
Qualification(s): Undergraduate student who has produced and presented the best round research project in MCB*4500 and/or MCB*4510 Research Project I and/or II in Microbiology.

Amount: 1 award of $500

Glenn Webb Education Scholarship/ GROWMARK Foundation OAC - Guelph Campus [I0897]
Apply by May 15 to the OAC Awards Office with a letter of no more than two pages outlining leadership and involvement in extracurricular activities, community service or agricultural employment, farming background and career aspirations. Preference will be given to students with an Ontario farm background and are interested in pursuing full-time employment in agriculture in the province of Ontario after graduation. Selection will be made on leadership and involvement in the field of agriculture through extracurricular activities, part-time work, and/or volunteer work are eligible.

Donor(s): Growmark, Inc.
Qualification(s): Students with a minimum cumulative average of 70% who have completed 10.0 credits of any OAC degree program.

Amount: 2 awards of $1,000

Gender Family Student Accessibility Services Volunteer Scholarship [I0563]
In recognition of the many students who volunteer their time and talents to assist their colleagues registered with the Student Accessibility Services (SAS) and to encourage others to do so, Dr. John and Mrs. Katherine Gonder provide this award to a student who has volunteered in the SAS. The award will be made on the basis of the volunteer activities undertaken by the student at the SAS, one letter of reference, and a personal statement that outlines the time commitment and types of volunteer activities undertaken as well as an indication of how this was a valuable and rewarding volunteer experience. Apply by January 15th to the SAS (c/o Advisor to Students with Disabilities) by submitting above documentation.

Donor(s): Dr. John and Mrs. Katherine Gonder
Qualification(s): All students registered in the College of Social and Applied Human Sciences (CSAHS) that have completed between 10.0 and 15.0 course credits with a minimum 70% cumulative average, and have been involved as volunteers with the SAS.

Amount: 1 award of $750
IX. Scholarships and Other Awards, Bachelor of Science

Gordon Ashton Mathematical Science Scholarship [I0543]
This scholarship is named in honour of Professor Gordon Ashton, a founding member of the Department of Mathematics and Statistics. The recipient will be selected on the basis of the highest average in a minimum of 4.0 credits from semesters 3 and 4. A student may be considered for this award only once. This award is not tenable with the Wally Fraser Mathematical Science Scholarship (I0544) or the R.C. Moffatt Memorial Scholarship in Mathematical Science (I0536). Application is not required.

Donor(s): Department of Mathematics and Statistics and (retired) Professor C. Dixon More, C.E.P.S.
Qualification(s): Students who have completed a minimum of 9.0 credits, but no more than 14.5 credits and are registered in a major offered by the Department of Mathematics and Statistics.
Amount: 1 award of $1,000

Governor General’s Medal [C0044]
Established by the Office of the Governor General of Canada. Application is not required.

Donor(s): The Chancellery
Qualification(s): Restricted to those undergraduate students in any degree program who are graduating in June, or who have graduated in the previous two convocations, with the highest cumulative average.
Amount: 2 awards of a Silver medal each

Grace Olivia Glofcheski Memorial Scholarship [I0977]
Established in loving memory of Grace Olivia Glofcheski (BSc ‘13, MSc ‘15) and supported by family, friends and peers to honour Grace’s time at U of G. Selection will be based on highest cumulative average. No application required.

Donor(s): Friends and Family of the Glofcheskis
Qualification(s): Students registered in CBS who have a minimum of 5.0 credits and who are varsity athletes. Preference will be given to students registered in Human Health & Nutritional Sciences.
Amount: 1 award of $2,000

Graduation Medal in Nanoscience [C0752]
The scholarships will be awarded to the students with the highest cumulative average. No application necessary.

Donor(s): Dean’s Office College of Physical and Engineering Science
Qualification(s): B.Sc. students who have graduated with a major in Nanoscience in the previous fall and winter semesters or will graduate with this major in the summer semester.
Amount: 1 award of a medal

Guelph Soap Company Scholarship [I0288]
Established by the Guelph Soap Company and awarded to the student with the highest average in BIOC*2580 and two courses in Organic Chemistry (CHEM*3750, 3750, 3760, 4720, 4730). Application is not required.

Donor(s): Tricorp Chemical Specialties
Qualification(s): Students registered in a major offered by the Department of Chemistry who have completed CHEM*3750 or CHEM*3760 during the previous calendar year and completed BIOC*2580.
Amount: 1 award of $1,200

H.O. Shackleton Memorial Prize [C0255]
Interested students should apply to the Chair of the Department of Molecular and Cellular Biology by April 1. The recipient will be selected by the Awards Committee of the College of Biological Science on the basis of the highest cumulative average grade amongst applicants who have not won a major scholarship (such as a NSERC or Ontario Government). Nomination will be made by the Department of Molecular and Cellular Biology at the end of the Winter semester.

Donor(s): Mrs. H.O. Shackleton
Qualification(s): Student graduating in the B.Sc. Microbiology (major or minor) and planning to pursue graduate studies in Microbiology at a recognized University.
Amount: 1 award of $500

Harry Barrett Memorial Scholarship [I1046]
This award was established through a gift from the estate of Mr. Harry Barrett, a graduate of OAC from 1949. Selection will be based on the highest cumulative average. Apply by May 15th to Student Finance with a written explanation of the planned experiential learning opportunity. If there are no applications by May 15th, the scholarship will be given to the student with the highest grade in ZOOG4920 in the previous Fall offering.

Donor(s): The Estate of Harry Barrett
Qualification(s): Students registered in any program who will be participating in field work related to bird studies. Preference will be given to students interested in research and/or study under the Bird Studies Canada program at their headquarters in Port Rowan, Ontario.
Amount: 1 award of $1,500

Highdale Farms Scholarship [I0348]
Established by Mr. Arthur Spoerri, who has had a professional career as an Economist. The student with the highest program average will be selected for one award and the second recipient will have the highest cumulative average from the listed counties. In the event the student with the highest average is also from the listed counties, the student with the second highest average will be selected. A student cannot hold two Highdale Farm Scholarships at the same time. Application is not required.

Donor(s): Arthur Spoerri
Qualification(s): Students registered in a program offered by the College of Engineering & Physical Sciences, excluding the Bachelor of Engineering program, who have completed minimum of 4.0 credits but no more than 16.0 credits and achieved at minimum 75% cumulative average. Preference given to students from Ottawa-Carleton, Dundas-Glengarry-Stormont, Grenville, Lanark, Prescott-Russell and Renfrew counties.
Amount: 2 awards of $5,000

HK/HB Alumni Association Graduation Prize [C0452]
The award recognizes a student who has contributed and provided leadership to the academic, administrative and social life of the department and the university, including academic activities (department/college committees, senate etc.), intramural and varsity athletics, support and assistance with class, college and university activities (such as HK/HB Symposium, College Royal etc.). Apply by application and include a resume to the Dept of Human Heath and Nutritional Sciences by mid-February, for students graduating in the subsequent June convocation or for students who graduated in the previous February or October convocations.

Donor(s): The HK/HB Alumni Association
Qualification(s): Students graduating with a BSc. major in Human Kinetics in the June or previous February or October convocations, with at least a ‘B’ cumulative average.
Amount: 1 award of a Medal

Honours Biochemistry Scholarship [I0128]
This scholarship is donated by the faculty of the Department of Molecular and Cellular Biology through their scholarship trust fund and is awarded annually in the Winter semester. Application is not required.

Donor(s): Department of Molecular and Cellular Biology
Qualification(s): The student enrolled in the Biochemistry Honours program or the Biochemistry Co-op program that has completed a minimum of 10.0 credits with the highest cumulative average.
Amount: 2 awards of $500

Honours Chemistry Scholarships [I0129]
These scholarships are donated by the faculty of the Department of Chemistry through their scholarship trust fund and are presented to the students with the highest cumulative averages over four semesters in each of the three majors: Honours Applied Pharmaceutical Chemistry, Honours Biological Chemistry, and Honours Chemistry. Application is not required.

Donor(s): Faculty of the Department of Chemistry
Qualification(s): BSc.(Tech) or BSc. students registered in an honors major offered by the Department of Chemistry who have completed a minimum of 10.0 credits including 3.0 credits from CHEM courses.
Amount: 3 awards of $750

Hugh Branion Memorial Scholarship [I0033]
The scholarship will be awarded on the recommendation of the Department of Human Health and Nutritional Sciences, based on academic achievement in the first 7 semesters. This scholarship is not tenable with the Brian L. Walker Memorial Scholarship. Application is not required.

Donor(s): Friends of Dr. Hugh Branion
Qualification(s): Student registered B.Sc. Nutritional and Nutraceutical Sciences major who have completed a minimum of 17.5 credits.
Amount: 1 award of $500

Hypercube Scholar Prize for Excellence in Chemistry [C0527]
Established to recognize the student graduating with the highest cumulative average in any chemistry program offered by the Department of Chemistry. Application is not required.

Donor(s): Hypercube Inc.
Qualification(s): Students graduating (or have graduated in the fall or winter of the current academic year) from a four-year degree program offered by the Department of Chemistry.
Amount: A award of a plaque and a molecular modelling software package
IMCD Canada Limited Scholarships [I0935]
Awarded to undergraduate students who are well rounded and have demonstrated this through involvement in leadership activities and extra-curricular activities on campus/in school/in the community. Each year one award will be given to one student in their 2nd, 3rd, and 4th year of study, defined by: a) 2nd year: completed a minimum of 5.0 credits but no more than 10.0 credits, co-op or regular; b) 3rd year: completed a minimum of 10.0 credits but no more than 15.0 credits, co-op or regular; c) 4th year: completed a minimum of 15.0 credits, co-op or regular; d) 4th year: completed a minimum of 15.0 credits, co-op only. Students may receive the award more than once, but must apply each year to be eligible. Apply by May 15 to the OAC Awards Committee with a statement of no more than 500 words describing involvement in leadership activities, positions held, extra-curricular activities, and involvement on campus/in school/in the community, and two supporting reference letters. E-mail the student statement as an attachment with scanned copies of reference letters to oacaward@uoguelph.ca referencing award name and ID# on subject line of e-mail.

Donor(s): L. V. Lomas Limited
Qualification(s): Students registered in the Food Science major (including co-op) who have completed a minimum of 5.0 credits, achieved at least a 75% average and who have demonstrated leadership and involvement in extracurricular activities.
Amount: 4 awards of $5,000

International Undergraduate Scholarship [I0577]
Established through a student referendum approved by the undergraduate student body, to recognize international students’ academic merit along with involvement/leadership activities during their enrollment at the University of Guelph. Apply to Student Financial Services, by May 15, with a letter indicating involvement/extracurricular activity since entry to the University. This award can only be held once by the student.

Donor(s): International Student Organization (ISO)
Qualification(s): Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.
Amount: several at awards of $3,000

Isabella Anderson Conway Scholarship [I0286]
Awarded to the student who has achieved the highest combined average in the courses NUTR*3210 Fundamentals of Nutrition and BIOC*2580 Introductory Biochemistry. Application is not required.

Donor(s): Mr. Charles Abbott Conway
Qualification(s): Students registered in a major offered by the department of Nutrition and Nutraceutical Sciences that has completed a minimum of 12.5 credits but no more than 15.0 credits.
Amount: 1 award of $500

J.B. Reynolds Graduation Medal in Physics [C0399]
This medal is awarded to a graduating student in the Spring semester or the previous Fall or Winter Semesters. Application is not required.

Donor(s): Department of Physics
Qualification(s): Student who has completed semester 8 of any of the majors in Physics and who has obtained the highest cumulative average in the required Physics courses of that program, normally taken in semester 5 to 8.
Amount: 1 award of a Medal

J.D. Cunningham Industrial Scholarship [I0287]
Apply to the O.A.C. Awards Office by May 15. Work experience in industrial microbiology, participation in extracurricular activities and demonstrated leadership skills will be considered in the selection.

Donor(s): J.D. Cunningham
Qualification(s): Students who have completed semester 6 in Food Science with a minimum cumulative average of 75%.
Amount: 1 award of $1,500

J.L. Campbell Scholarship [I0479]
Established in honour of J.L. (Iain) Campbell, former Provost and Vice-President (Academic), of the University of Guelph from 1995 to 2000 and former Dean of the College of Engineering and Physical Sciences from 1987 to 1995. Application is not required.

Donor(s): Family, friends and colleagues of J.L. Campbell
Qualification(s): Student who is currently registered in one of the majors in Physics and who has completed at least 12.50 credits, with a high cumulative average (at least 80%) in the required Physics courses normally taken in Year 2 and 3 of the major.
Amount: 1 award of $2,000

J.M. Christie Prize [C0213]
Application is not required.
Donor(s): Dr. G.I. Christie
Qualification(s): Graduating student in the Food Science major of the B.Sc. program with the highest academic standing throughout eight semester levels.
Amount: 1 award of a plaque

J.W. Skinner Medal in Social Science [C0260]
Established in honour of the many contributions of Dr. J.W. Skinner, a former Dean of the College of Social Sciences. Application is not required.
Donor(s): Faculty, staff, alumni and students, of the former College of Social Science
Qualification(s): Present to the C.S.A.H.S. Winegard Medal nominee.
Amount: 1 award of a Medal

Jack and Lillian MacDonald Scholarship [E0379]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

Donor(s): Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald
Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).
Amount: 1 award of $900

Jack K. Barclay Physiology Scholarship [I0491]
Established in honour of Professor J.K. Barclay, Director of the School of Human Health from 1989-1991. He was the first chair of the Department of Human Health and Nutritional Sciences from 1996-2001 and was involved in creating, teaching and implementing HK*3940 Human Physiology. Apply by application by mid February to the main office, HHNS.

Donor(s): Friends and family of J.K. Barclay
Qualification(s): Full-time undergraduate student enrolled in a major within the Department of Human Health and Nutritional Sciences, who has completed HK*3940, Human Physiology with a minimum 70% average and who has made leadership contributions to the University or the outside community.
Amount: 1 award of $500

James L. Hunt Scholarship [I0603]
Established on honour of Professor Emeritus James L. Hunt, Medal of Merit recipient. The recipient will have achieved the highest cumulative average over 80%. This award cannot be held with any other awards offered by the Department of Physics. Application is not required.

Donor(s): Department of Physics
Qualification(s): Students registered in any major offered by the Department of Physics that have completed 10.0 credits and have achieved a minimum 80% cumulative average.
Amount: 1 award of $2,000

James L. Mottin Prize for Academic and Extracurricular Excellence [C0344]
The department of Psychology recognizes its nominee for the Winegard Medal with a $500 prize. No application required.

Donor(s): The Department of Psychology
Qualification(s): Students registered in the Psychology major of the BA or BSc programs.
Amount: 1 award of $500

James M. Dougan Ecology Scholarship [I0943]
Apply by May 15 to the OAC awards committee, oacaward@uoguelph.ca, with a single page letter outlining extracurricular activities related to environmental issues and indicate number of contributed hours over the last 12 months (June to May). Selection will be based on the greatest number of participatory hours in environmental related extracurricular activities over the last 12 months (May to June).

Donor(s): Mr. James M. Dougan
Qualification(s): Students registered in the Environmental Science or Ecology Majors in the B.Sc. Env. program or the Biodiversity or Environmental Biology Major of the B.Sc. program who have completed a minimum of 15.0 credits, have a minimum cumulative average of 75% and participation in environmental related extracurricular activities.
Amount: 1 award of $1,000
Jane Collins Scholarship [I0869]
Selection will be based on demonstrated significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities. Preference will be given to students engaged in community-based service and future participation in curriculum-embedded experiential learning opportunities. The project must be part of a course of study rather than volunteer activity. Apply to the CSAHS Awards Committee by May 15 with a summary letter outlining prior significant contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities.

**Donor(s):** Mrs. Jane L. Collins, MAC BHSc 1955
**Qualification(s):** Students registered in any program offered by the College of Social and Applied Human Sciences who have completed 5.0 credits and will be participating in curriculum-embedded community-based experiential learning as part of a course of study in the following year.

**Amount:** 1 award of $1,000

Janet Wardlaw Memorial Scholarship [I0937]
Established in memory of Janet Wardlaw, the first Dean of Family and Consumer Studies (FACS). In odd numbered years, this scholarship recognizes a student registered in the Gordon S. Lang School of Business and Economics (LANG). In even numbered years, this scholarship recognizes a student registered in the College of Social and Applied Human Sciences (CSAHS). Additional preference will be given to students with experiential learning involving international travel. Apply by May 15th. In odd-numbered years, applications can be submitted to the Gordon S. Lang School of Business and Economics Awards Committee (lang.awards@uoguelph.ca). In even numbered years, applications can be submitted to the College of Social and Applied Human Sciences Awards Committee. Include a one page letter outlining community-based service or extracurricular involvement demonstrating leadership skills and volunteerism. In addition, indicate if experiential learning opportunities involved international travel.

**Donor(s):** Class of FACS 1974
**Qualification(s):** Students registered in any program offered by LANG or CSAHS with a minimum cumulative average of 75% who have completed or are currently enrolled in curriculum-embedded experiential learning who demonstrates significant volunteer contribution to community-based service or extracurricular involvement.

**Amount:** 1 award of $1,000

Jim Stokman Memorial Scholarship [I0386]
Mrs. Stokman and family, including her sons Nick (O.A.C.'77) and Andrew (O.A.C.'84) have established this award in memory of her husband and their father to recognize his lifetime contribution to the family farm. Apply by May 15th to the OAC Awards Office with a letter that indicates rural background and demonstrated community/student involvement both during high school and the first two semesters of University.

**Donor(s):** Mrs. Jim Stokman
**Qualification(s):** Available to O.A.C. students who have completed 5.0 credits with at least ‘B’ average in one of the following programs: B.Sc.(Agri.), B.Com., B.Sc. or B.Sc.(Env). Students must have come from a rural background and have demonstrated community/student involvement both during high school and the first two semesters of University.

**Amount:** 1 award of $500

John Burton Scholarship [I0642]
Established by Dr. John Burton, BSA 1962, a former faculty member in the Department of Animal Biosciences. Selection will be based on involvement with and contribution to the horse industry, future career aspirations in the horse industry sector and participation in community activities. Preference will be given to student who have demonstrated leadership ability within the student body. Apply by May 15 to the OAC Awards Office with a letter, of no more than two-pages, outlining involvement with and contributions to the horse industry, career aspirations, and extracurricular involvements. Awarded in the fall semester.

**Donor(s):** Dr. John Burton
**Qualification(s):** Students registered in any program offered by the OAC who have completed between 10.0 and 12.0 credits with a minimum 70% average

**Amount:** 1 award of $1,000

John T. Powell Scholarship [I0237]
Apply to the Department of Human Health and Nutritional Sciences (HHNS) main office by mid February using the department's application outlining participation in extra-curricular on campus activity and contributions made to the annual HHNS Symposium at the organizational and/or operational level.

**Donor(s):** Human Kinetics Alumni Association
**Qualification(s):** Full-time students enrolled in any honors program within the Department of H.H.N.S. with a minimum 10.0 credits and a minimum cumulative average of 70% and has participated in the H.H.N.S. Symposium and other on-campus extra-curricular activities.

**Amount:** 1 award of $500

Johnson & Johnson Diversity and Inclusion Scholarship in Science [I1107]
Apply by May 15th to the office of the Associate Dean Academic in the College of Biological Science with two supporting reference letters. Selection will be based on greatest demonstrated leadership to increase advocacy for diversity and inclusion in the community through positions held, extracurricular activities and involvement on campus and in the community as evidenced by two letters of reference. Leadership that increases advocacy for inclusion; creating an environment that is safe, positive, respectful and diverse; recognizes and celebrates the range of social identity groups that comprise the community. Students may hold this award only once.

**Donor(s):** Johnson & Johnson
**Qualification(s):** Students registered in any program offered by the College of Biological Science or the College of Engineering and Physical Sciences with a minimum cumulative average of 75% who have completed 4.0 credits and who have demonstrated leadership to increase advocacy for diversity and inclusion in the community. Preference will be given to leadership in the Guelph community.

**Amount:** 1 award of $1,000

Kae and Gordon Skinner Memorial Scholarship [C0258]
Provided by the late Kae Stalker Skinner (Mac ’30) and Gordon Skinner (O.A.C.’24), former Registrar of the Ontario Institute of Agrologists. Consideration will be given to participation in the Student Branch of the Ontario Institute of Agrologists. Apply to the O.A.C. Awards Office by April 1 with a letter demonstrating contributions to agrology.

**Donor(s):** The estates of the late Mr. and Mrs. A.G. Skinner
**Qualification(s):** O.A.C. student graduating from the B.Sc.(Agri.), B.Sc., or B.Comm. programs who has made a significant contribution to developing an understanding of the profession of agrology among fellow students.

**Amount:** 1 award of $500
Ken and Marilyn Murray Scholarship [10734]
Dr. Kenneth G. Murray C.M., OAC BSA ‘50 and Honourary Doctor of Laws ’96, and Mrs. Marilyn C. Murray, Mac BHS ’55, established this scholarship. Selection will be based on significant prior contributions to and experience in community-based service. Application to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

Donor(s): Dr. Kenneth G. and Mrs. Marilyn C. Murray
Qualification(s): Full-time students registered in the College of Social and Applied Human Sciences with a minimum 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the province of Ontario in the following academic year will be eligible for this award.
Amount: 1 award of $2,000

Kenneth James Berg Memorial Scholarship [10370]
Established by Friends and Family in memory of Ken Berg, a 1982 C.B.S. Microbiology alumnus. The focus of this award reflects Ken's success in applied education in the workforce. Nomination by the Microbiology Co-op Program Committee. Application is not required.

Donor(s): Family and friends of Ken Berg
Qualification(s): Students registered in the Microbiology co-op program in the C.B.S. who have completed all aspects of the third co-op work term.
Amount: 1 award of $1,000

Kenneth W. Hammond Scholarship [10045]
Student with the highest grade in the course ENVS*2070 "Environmental Perspectives and Human Choices.” Application is not required.

Donor(s): Kenneth W. Hammond
Qualification(s): Students who have completed the course Environmental Perspectives and Human Choices ENVS*2070
Amount: 1 award of $1,000

Kevin Durie Memorial Scholarship [10653]
Established in memory of Kevin Durie, BA ’93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.

Donor(s): Christine Blake-Durie
Qualification(s): Students who are registered in any degree program on the University of Guelph campus, are a member of Residence Life staff and are academically eligible to continue as a Residence Assistant or as part of Residence Life staff.
Amount: 2 awards of $1,000

Kip Hunter Prize [10139]
For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May 1.

Donor(s): Faculty, students and staff of the Philosophy Department
Qualification(s): Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.
Amount: 1 Book prize

Lambda Foundation Scholarship in LBGT Studies [10591]
This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LBGT peoples. Preference will be given to an applicant who has engaged in LBGT community as demonstrated by a record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a given student only once. Projects must have been completed or research proposals accepted within the past calendar year. Apply to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referencing involvement in the LBGT community and/or faculty support.

Donor(s): Lambda Foundation and other donors
Qualification(s): Students enrolled in a program with a thesis, a research essay, independent research project or course work programs pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.
Amount: 1 award of $1,000

Lange and Prokipcak Chemistry Scholarship [10528]
This scholarship was established by Professor Gordon L. Lange, Professor Joe M. Prokipcak, friends and colleagues. Professors Gordon L. Lange and Joe M. Prokipcak were valued members of the chemistry Faculty who retired in 2001. Their excellence in teaching was recognized within the university and nationwide, winning them a total of eleven teaching awards. This scholarship will be awarded to the student with the highest average grade in CHEM*1040,1050 and 2700. Application is not required.

Donor(s): Professor Gordon L. Lange, Professor Joe M. Prokipcak and friends and colleagues
Qualification(s): Student registered in any program offered by C.E.P.S who has completed CHEM*1040, CHEM*1050, CHEM*2700 and have completed a minimum of 10.0 credits up to a maximum of 14.75 credits.
Amount: 1 award of $1,000

Lautens Prize in Organic Chemistry [10882]
This scholarship recognizes academic excellence in a graduating student with a focus on organic chemistry. Selection will be based on the highest cumulative average across these four courses. In the case of a tie, the student with the highest grade in CHEM*4730 will be awarded the scholarship. No application required.

Donor(s): Dr. Mark Lautens
Qualification(s): Students registered in any major offered by the Department of Chemistry who have completed CHEM*2700 Organic Chemistry I, CHEM*3750 Organic Chemistry II, CHEM*3760 Organic Chemistry III, and CHEM*4730 Synthetic Organic Chemistry.
Amount: 1 award of $1,500

Leibniz/Newton Scholarship [10156]
Established in honour of two founding fathers of calculus. Selection will be based on highest combined average over 80% in MATH*1200 and MATH*1210 or equivalent. Not tenable with the T.D. Newton Memorial Scholarship (10198) and Second Year Math & Stats Scholarship (10739). A student may be considered for this award only once. Application is not required.

Donor(s): The Department of Mathematics and Statistics
Qualification(s): Students registered in a major offered by the Department of Mathematics and Statistics who have completed a minimum of 4.0 but no more than 8.5 credits with a cumulative average of at least 80% and completed MATH*1200 and MATH*1210.
Amount: 1 award of $1,000

Leonard Connolly Exchange Student Scholarship [10446]
Established by students, faculty, staff and friends to honour Prof. Leonard Connolly, professor of drama, Chair of the Department of Drama, 1981-88, and Associate Vice-President Academic, 1988-1992. Apply to the Centre for International Programs by April 5, for visiting during the subsequent Fall or Winter semesters. Selection, by the Centre for International Programs, will be based on assessment of (a) a one-page submission describing the significance of the student visiting Guelph to the program of study at the partner exchange university (b) two faculty references of one-page each, and (c) consistent high performance in the course work completed, as documented by a transcript of program grades to date, submitted by the home university.

Donor(s): Students, staff, faculty and friends of Dr. Leonard Connolly
Qualification(s): Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).
Amount: 1 award of $1,000
Linda S. Allen Memorial Graduation Prize [C0914]
This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Advising Medallion, on the occasion of its second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant circumstances during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).

Donor(s): Brian Allen, Family, Friends and Colleagues of Linda S. Allen
Qualification(s): Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.
Amount: 1 award of $1,000

Lionel Bradley Pett Scholarships [10486]
This scholarship was established through the generosity of Dr. Lionel Bradley Pett, an O.A.C.'30 alumnus, and a life-long contributor to nutritional sciences in Canada, to recognize academic excellence. Application is not required.

Donor(s): Lionel Bradley Pett
Qualification(s): Full-time B.Sc. students who have declared a major offered by the Department of Human Health and Nutritional Sciences. The awards are allocated to the three students, with the highest cumulative averages, who have completed 5.0, 10.0 and 15.0 to 15.75 credits respectively.
Amount: 3 awards of $2,500

Lorena Karli Sears Scholarship [10968]
Professor Mark Sears, a retired Entomologist from the School of Environmental Sciences, established this scholarship in memory of his grandmother, Lorena Karli Sears who was a resourceful farm girl from the U.S., with an interest in the environment. Students will be selected by: 1. Clearly designed plan for research; 2. Student’s research potential as described by an academic reference letter from an instructor; and 3. Cumulative GPA. Apply to the OAC Awards Committee by May 15th with a statement describing your research potential and a reference letter describing your research potential. To submit your statement, please email it as an attachment to oacaward@uoguelph.ca. Please include the title of the award and the award ID number in the subject line of your email and on your application. Please also include your student ID number on your application. Faculty members can email their reference letter to oacaward@uoguelph.ca.

Donor(s): Mark Sears
Qualification(s): OAC students who are registered in the B.Sc. (Env.), B.Sc. with a major in Environmental Biology, or the Bachelor of Bio-Resource Management with a major in Environmental Management who have completed a minimum of 12.0 credits and are registered in one of ENVS*4410, ENVS*4510, ENVS*4001/2 or another research project/Independent Study course.
Amount: 1 award of $2,500

Mac 1971 Keith and Rosalind Slater Tribute Scholarship [10830]
Established in recognition of Dr. Keith Slater, Honourary Class President for Mac '71, and Rosalind Slater. Selection will be based on leadership ability as demonstrated through extracurricular involvement, and/or dedication to volunteerism and community-based service in any of the following areas: family relations, applied nutrition, theatre arts, environment sciences, or children’s literacy. Apply to the CSAHS Awards Committee by May 15th with a resume and a one page summary letter outlining extracurricular involvement, leadership experience, volunteerism and community-based service, as well as how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year. The award can only be held once.

Donor(s): Class of Mac 1971
Qualification(s): Full-time student registered in any major within the College of Social and Applied Human Sciences who has completed a minimum of 8.0 credits with a minimum cumulative average of 75% and is participating in curriculum-embedded community-based experiential learning in the following academic year.
Amount: 1 award of $1,000

MAC 67 50th Anniversary Scholarship [11090]
Established by the Class of MAC 1967 in recognition of their 50th anniversary, this award recognizes students registered in any program offered by the College of Social and Applied Human Sciences who demonstrate a commitment to the well-being of families and individuals through volunteering or experiential learning. Apply to the CSAHS Awards Committee by May 15th with a one-page letter outlining volunteer and experiential learning and a reference letter demonstrating commitment to the well-being of families and individuals.

Donor(s): The Class of MAC 1967
Qualification(s): Preference will be given to students in the Department of Family Relations and Applied Nutrition. If all else considered equal, this award will go to the student with the highest cumulative average.
Amount: 1 award of $1,500

Macdonald Stewart Scholarship in Memory of Walter and May Stewart [10813]
Selection will be based on significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities in the following academic year. Preference will be given to those studying in the areas of applied nutrition, sustainable food systems or environmental governance. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

Donor(s): The Macdonald Stewart Foundation
Qualification(s): Students registered in any program offered by the College of Social and Applied Human Sciences who are participating in curriculum-embedded experiential learning opportunities in the following academic year.
Amount: 1 award of $3,500

MacKenzie Scholarship [10398]
In honour of University Professor Emeritus Innes K. MacKenzie. Not tenable with the Egelstaff Scholarship. Application is not required.

Donor(s): Department of Physics
Qualification(s): Students who have completed 12.5 course credits and are currently registered in one of the majors in physics. It is given to a student with a high cumulative standing (of at least 80%) in the required physics courses normally taken in Years 2 & 3 of the major.
Amount: 1 award of $1,500

MacNaughton Scholarship [10422]
Established by Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application is not required.

Donor(s): Earl B. MacNaughton
Qualification(s): Student who has completed semester 5 and is currently registered in one of the majors in Physics and has a high cumulative average (at least 80%) in the required Physics courses normally taken in semesters 3, 4 and 5 of the major.
Amount: 1 award of $1,000
Mae McEwen Memorial Scholarship [I0185]

Apply to the OAC Awards office by May 15 with a letter outlining extra curricular activities related to environmental issues.

**Donor(s):** The estate of Mae McEwen  
**Qualification(s):** Student who has completed semester 6 of the Environmental Biology major in the B.Sc. or B.Sc (Environ.) programs with a cumulative average of 80% or better. Participation in extra curricular activities related to environmental issues will be considered in determining the recipient.

**Amount:** 1 award of $500

Marie Curie Scholarship in Physics [I0915]

Established in honour of a distinguished Physics Professor Emeritus. Selection will be made to the student with highest cumulative average. Award may be held only once. No application required

**Donor(s):** Anonymous  
**Qualification(s):** Students registered in any major offered by the Department of Physics who have completed a minimum of 15.0 credits and have achieved a minimum of 80% cumulative average.

**Amount:** 1 award of $1,500

Marion McKenzie Scholarships for Outstanding Achievement in History [I0470]

These prizes have been established in memory of Marion McKenzie (1905-1994), a teacher who had a love of learning and a continuing curiosity about the world both past and present. These are awarded to the top student in each of the required core courses in the History program (HIST*1050, HIST*2450,) in the previous academic year. Application is not required.

**Donor(s):** Dr. James Snell and Mrs. Leslie Snell  
**Qualification(s):** Students who have completed one of the following required core courses in History: HIST*1050 and HIST*2450. The recipient for HIST*1050 must have completed no more than 5.0 credits; the recipient for HIST*2450, no more than 10.0 credits and be in the specialization in History.

**Amount:** 2 awards of $1,000

McNeil Consumer Healthcare Diversity and Inclusion Scholarship in Science [I0947]

Established to acknowledge students who demonstrate leadership by increasing advocacy for diversity and inclusion in the community. Selection will be based on greatest demonstrated leadership to increase advocacy for diversity and inclusion in the community through positions held, extracurricular activities and involvement on campus and in the community as evidenced by two letters of reference. Leadership that increases advocacy for inclusion; creating an environment that is safe, positive, respectful and diverse; recognizes and celebrates the range of social identity groups that comprise the community. Apply by May 15th to the CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) with two letters of reference. Preference will be given to leadership in the Guelph community. Students may hold this award only once.

**Donor(s):** McNeil Consumer Healthcare  
**Qualification(s):** Students registered in any program offered by the College of Sciences or the College of Engineering and Physical Sciences with a minimum cumulative average of 80% who have completed 4.0 credits and who have demonstrated leadership to increase advocacy for diversity and inclusion in the community.

**Amount:** 1 award of $4,000

Michele and Maria Vannelli Scholarship [I0988]

Dr. Tony Vannelli, Dean of the College of Physical & Engineering Science from 2007 to 2016, and his wife, Voula, established this award in honour of Dr. Vannelli’s parents, Michele and Maria Vannelli. Selection will be based on high cumulative average and demonstrated engagement in the community, preferably in a leadership role supported by two letters of reference from individuals who or organizations that have knowledge of and can attest to that experience. The recipient will be chosen by the Director of the College of Physical & Engineering Science with a letter of application and two supporting reference letters from individuals or organizations attesting to community engagement experience. Preference will be given to leadership in the Guelph community. Students may hold this award only once.

**Donor(s):** Michele and Maria Vannelli  
**Qualification(s):** Students registered in any program offered by the College of Physical & Engineering Science who have completed a minimum of 5.0 credits and have demonstrated engagement in the community, preferably in a leadership role.

**Amount:** 1 award of $1,000

Monroe Landon Memorial Scholarship [I0153]

Preference will be given to students from the counties of Norfolk or Haldimand as evidenced in letter of application. Selection will be based on the student who has demonstrated the most active interest in field biology and conservation of native flora. Apply by May 15 to the main office, Integrative Biology (SCIE Room 2481) with a one-page letter of application, one letter of support and a resume that outlines volunteer work experiences in field biology and conservation of native flora.

**Donor(s):** Norfolk Field Naturalists and family of Monroe Landon  
**Qualification(s):** Students registered in any program offered by the Department of Integrative Biology who have completed between 14.5 and 17.5 credits with a minimum 75% cumulative average and who have demonstrated an active interest in field biology and conservation of native flora.

**Amount:** 1 award of $2,000

Nathan Max Goldman Choir Scholarships [I0774]

Established in honour of Mr. Goldman, an OAC graduate (1945 and 1947) and former President of the Philharmonia Society at the University of Guelph. The scholarships will support two students who demonstrate outstanding leadership and vision in the Symphonic Choir and/or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high vocal achievement and choral leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required as a recommendation by Choir Director will be made to the SOFAM Awards Committee.

**Donor(s):** Mrs. Anne Goldman and the family of Nathan Max Goldman  
**Qualification(s):** Students registered in any degree program who are currently a member of the University of Guelph Symphonic Choir and/or the Chamber Choir and have been a member of the University of Guelph Choirs for at least two years.

**Amount:** 2 awards of $1,000

Natural Resource Solutions Prize in Field Ecology [I1058]

Natural Resource Solutions Inc. established this award to acknowledge students demonstrating academic excellence in the area of field work in ecology. Selection is based on the highest grade in the course. This scholarship cannot be held at the same time as Natural Resource Solutions Scholarship in Laboratory and Field Work in Ecology I1057. Application is not required.

**Donor(s):** Natural Resource Solutions Inc.  
**Qualification(s):** Students who completed Field Ecology in the previous fall semester BIOL*4410

**Amount:** 1 award of $1,000

Natural Resource Solutions Scholarship in Laboratory and Field Work in Ecology [I1057]

Natural Resource Solutions Inc. established this award to acknowledge students demonstrating academic excellence in the area of field work in ecology. Selection is based on the highest grade in the course. This scholarship cannot be held at the same time as Natural Resource Solutions Prize in Field Ecology I1058. Application is not required.

**Donor(s):** Natural Resource Solutions Inc.  
**Qualification(s):** Students who completed Field Work in Ecology BIOL*3010

**Amount:** 1 award of $1,000

Nick Westwood Memorial Scholarship in Spectroscopy [I0982]

In recognition of Professor Nick Westwood’s enduring contributions to the field of Molecular Spectroscopy, and his devotion to academic development and achievement at all levels, his family, friends and Department of Chemistry colleagues have established this award to honour his memory. Selection will be based on the highest grade in CHEM*2070 Structure and Spectroscopy. In the event of a tie, the award will go to the student with the highest cumulative average. Application not required.

**Donor(s):** Staff, faculty and friends of the Department of Chemistry  
**Qualification(s):** Students registered in any degree program with a minimum 80% cumulative average who have obtained a minimum of 80% in CHEM*2070 Structure and Spectroscopy.

**Amount:** 1 award of $1,000
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>[ID]</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Norma Bowen Memorial Scholarship in Psychology</strong> [I0154]</td>
<td>Established in memory of Norma Bowen, former faculty member in the Department of Psychology and herself a mature student. Preference will be given to students who have graduated from high school more than six years ago. No application required.</td>
<td></td>
</tr>
</tbody>
</table>

| **Norman McCollum Dairy Scholarship** [I0815] | Norman McCollum, Diploma Agriculture ’66, past president of OACAA and retired employee of the Guelph Turfgrass Institute has created this $1500 scholarship through the OAC Alumni Foundation in recognition of his valued friendship with Glenhome Jersey Farm. Selection will be based on highest cumulative average. Apply to the OAC Awards office by May 15, with a letter stating intent to return to the family dairy farm or pursue a career in the dairy industry. |

| **O.A.C.’55 Scholarships** [I0064] | Provided by the class of O.A.C. ’55. Recipients will have made an outstanding contribution to College life through academic proficiency and participation in extracurricular activities and can be considered to have done the most for the College, for fellow students and in their personal development. Apply by May 15 to the OAC Dean’s Office (Awards) with a letter outlining your participation in Class/College/University activities. Awarded in the fall semester. |

| **O.A.C. Centennial Graduate Prizes** [C0209] | The Ontario Agricultural College celebrated its 100th Anniversary in 1974. Many organizations and companies associated with the agricultural industry provided funds in conjunction with the Centennial activities. Funds have been established in perpetuity as a permanent commemoration of the Centennial of the College. Apply to OAC Awards Office by April 1 with a letter outlining extracurricular activities. Selection will be based on academic achievement in semesters 7 and 8, as well as participation in extracurricular activities throughout the student's university career. |

| **O.A.C. Students' Federation Medal** [C0217] | Application is not required. |

| **OAC’45 Public Speaking Scholarship** [H0200] | Offered by the Class of 45 O.A.C., on the occasion of their 40th anniversary. Apply with a one page letter summarizing public speaking experience to the OAC Awards Office by May 15. Selection will be based on demonstrated excellence and effort in public speaking within or outside of the University of Guelph (i.e. TEDx, Toastmasters, 4-H, community events). |

| **Ollerhead Scholarship in Physics** [I1028] | Established in honour of Professor Emeritus Robin W. Ollerhead, Chair of the Department of Physics 1982-1993. Selection will be based on the highest average greater than 80% in Physics courses for that major normally taken by a full time student in semesters 3, 4, and 5. This is one of five identical awards in Physics to be given to the top five students with highest averages according to the selection criteria. (The other awards are the MacNaughton, Campbell, Egelstaff & Mackenzie scholarships.) The award cannot be held concurrently with another award from the Physics Department and can be held only once. No application is required. |

| **Ontario Dairy Council Prize** [C0221] | The Ontario Dairy Council offers this scholarship in honour of the late P. Bruce Scott. Application is not required. |

| **Ontario Food Protection Association Scholarship** [I0223] | Apply to the O.A.C. Awards Office with a letter by May 15. |

| **Ontario Fruit & Vegetable Convention Gary Ireland Memorial Scholarship** [I0773] | Selection will be based on a demonstrated interest in horticulture/vegetable production and academic standing. Apply by May 15 to the OAC Awards Committee (oacaward@uoguelph.ca) by letter (no more than 2 pages) outlining the horticulture/vegetable production courses you have taken and include any work related experience. Please include the award name and ID number in the subject line of your email and on your application. |

| **Ottawa Valley Agri Business Association Scholarship** [I0858] | Apply to the OAC Awards Office (oacaward@uoguelph.ca) May 15 with a two page letter outlining your participation in extracurricular activities and your demonstrated academic achievement and your interest in animal science, crop production, soil science or agricultural economics. Please include the Award Name and ID in the subject line of your email and on your application. Please also include your student ID on your application. Selection will be based on outstanding academic merit and participation in extracurricular activities. |

Last Revision: July 4, 2019
OVC 1966 Legacy Scholarship [I2198]
In honour of their 50th reunion the class of OVC 1966 decided to commemorate their time at OVC by establishing the OVC 1966 Legacy Award. Students registered in Phase 3 at the Ontario Veterinary College are eligible for this award who have participated in extra-curricular activities and have demonstrated enthusiasm and leadership.

**Donor(s):** The Class of OVC 1966

**Qualification(s):** Selection is based on a Phase 3 class vote for the student with the greatest demonstrated enthusiasm, class spirit and comradeship, and dedication to school leadership, through participation in extra-curricular activities such as college governance, student clubs, academic conferences and continuing education opportunities.

**Amount:** 1 award of $2,500

Pal Fischer Mathematical Science Graduation Prize [C0182]
Selection is based on highest cumulative average. Application is not required.

**Donor(s):** Faculty members, who will be anonymous, through the College of Physical Science and Engineering Expendable Scholarship Fund

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations with a major offered by the Department of Mathematics & Statistics and achieved a minimum 80% cumulative average.

**Amount:** 1 award of $500, 1 Commemorative plaque

Pari Basrur Research Prize (BIOM*4510) [C1042]
Established in honour of Dr. Pari Basrur, who was a Professor Emeritus of the Department of Biomedical Sciences from 1995 - 2012. Dr. Basrur was also the first woman to be appointed full Professor at a Canadian veterinary college in 1967. Dr. Basrur maintained a vibrant, internationally acclaimed research program in medical genetics for over 50 years, and was a popular teacher and recipient of numerous awards, including the Order of Canada, for her work both at the University of Guelph and Internationally. She was a positive role model for women in science and students in general throughout her career. This award was established to honour her illustrious career and Dr. Basrur’s extraordinary contribution to the community of scientists. Selection is based on the highest average of the student’s research paper grade and seminar grade of BIOM*4510. In the event of a tie, highest final grade in course.

**Donor(s):** Department of Biomedical Sciences

**Qualification(s):** Students graduating or who have convocated in the previous 2 semesters in the Biomedical Science Major, enrolled in Research in Biomedical Sciences (BIOM*4510) and achieved a minimum 90% grade in the course.

**Amount:** 1 award of $300

Pari Basrur Research Prize (BIOM*4521/2) [C1041]
Established in honour of Dr. Pari Basrur, who was a Professor Emeritus of the Department of Biomedical Sciences from 1995 - 2012. Dr. Basrur was also the first woman to be appointed full Professor at a Canadian veterinary college in 1967. Dr. Basrur maintained a vibrant, internationally acclaimed research program in medical genetics for over 50 years, and was a popular teacher and recipient of numerous awards, including the Order of Canada, for her work both at the University of Guelph and Internationally. She was a positive role model for women in science and students in general throughout her career. This award was established to honour her illustrious career and Dr. Basrur’s extraordinary contribution to the community of scientists. Selection is based on the highest average of the student’s research paper grade and seminar grade of BIOM*4521/2. In the event of a tie, highest final grade in course.

**Donor(s):** Department of Biomedical Sciences

**Qualification(s):** Students graduating or who have convocated in the previous 2 semesters in the Biomedical Science Major, enrolled in Research in Biomedical Sciences (BIOM*4521/2) and achieved a minimum 90% grade in the course.

**Amount:** 1 award of $300

Parrish and Heimbecker Scholarship (formerly known as Heimbecker Scholarship in Entrepreneurship) [I0388]
Parrish and Heimbecker, Limited is a private, family owned business, founded in 1909 involved in many aspects of agri-business across Canada. This scholarship was established to honour Herb Heimbecker's service and contribution to the agri-food industry in Canada. Apply by May 15 to the OAC Awards Committee at oacaward@uoguelph.ca with a resume demonstrating the students’ level of involvement with the agricultural and food industry. Please include the name of the award and the Award ID number in the subject line of your email and on your application. Please also include your student ID number on your application. Selection will be based on demonstrated commitment to the agricultural and food industry measured by the approximate number of hours a student has dedicated per week to work and/or extracurricular and/or volunteer activities related to the agricultural and food industry during their Undergraduate degree.

**Donor(s):** Friends and Associates of Herb Heimbecker

**Qualification(s):** Students registered in any OAC program, who have completed a minimum of 10 credits who have demonstrated their passion and commitment to the agricultural and food industry through their extracurricular and/or volunteer activities during their Undergraduate degree and who aspire to have a career in the agricultural and food industry.

**Amount:** 1 award of $1,000

Peter Mann Prize for Embryology [I2032]
Provided by colleagues and friends of Dr. Mann, a scholar and teacher of Embryology from 1954-1987. Selection will be based on the highest average in the course. Application is not required.

**Donor(s):** Colleagues and friends of Dr. Mann

**Qualification(s):** Students registered in the Bio-Medical Science Major and who have completed Medical Embryology BIOM*3040.

**Amount:** 1 award of $200

Pharmacia & Upjohn Scholarship in Microbiology [I0295]
Offered in the Winter Semester by the Pharmacia Company of Canada. Not tenable with the Shutt Memorial Scholarship. Application is not required.

**Donor(s):** Pharmacia & Upjohn International Inc.

**Qualification(s):** Student enrolled in the B.Sc. Microbiology major who has completed Medical Embryology BIOM*3040 and has dedicated per week to work and/or extracurricular and/or volunteer activities during their Undergraduate degree and who aspire to have a career in the agricultural and food industry. Please include the name of the award and the Award ID number in the subject line of your email and on your application. Please also include your student ID number on your application. Selection will be based on demonstrated commitment to the agricultural and food industry measured by the approximate number of hours a student has dedicated per week to work and/or extracurricular and/or volunteer activities related to the agricultural and food industry during their Undergraduate degree.

**Donor(s):** Friends and Associates of Herb Heimbecker

**Qualification(s):** Students registered in any OAC program, who have completed a minimum of 10 credits who have demonstrated their passion and commitment to the agricultural and food industry through their extracurricular and/or volunteer activities during their Undergraduate degree and who aspire to have a career in the agricultural and food industry.

**Amount:** 1 award of $1,000

Precambrian Aquatic Prize [I1121]
Established by CRS alumni Neil and Barb Hutchinson to honour their interest in aquatic science. Selection will be based on the highest grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. This award is not tenable with the Excellence in Marine and Freshwater Biology Scholarship I1120. Application is not required.

**Donor(s):** Neil and Barb Hutchinson

**Qualification(s):** Students who have completed the Integrative Marine and Freshwater Research course IBIO*4600.

**Amount:** 1 award of $1,000

Priscilla and Stanford Reid Trust Prize [I0597]
Established in honour the first chair of the History Department, Stanford Reid, and his wife, Priscilla Reid to acknowledge the best paper written about the history of Presbyterianism and/or the Reformed tradition. Apply, by April 1, with a copy of the paper and a covering letter including contact information to the Department of History Awards Chair.

**Donor(s):** Priscilla and Stanford Reid Trust Fund

**Qualification(s):** Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.

**Amount:** 1 award of $500
### Professional Staff Association Future Leader Scholarship [I1132]
This scholarship is provided to students whose leadership involvement makes a positive impact at the University of Guelph and/or the broader community. Apply by email to awards@uoguelph.ca by May 15 with one letter of reference and a personal statement (max. 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average will be awarded. This award may not be held more than once.

**Donor(s):** The Professional Staff Association (PSA)

**Qualification(s):** Students registered in any program who demonstrate involvement in leadership opportunities that result in positive community impact, and who are from the immediate family of full-time, part-time, contractual or retired members of the Professional/Managerial Group at the University of Guelph. Preference will be given to a student that has not received the Professional Staff Association Scholarship in the same year.

**Amount:** 1 award of $1,500

### Professional Staff Association Scholarship [I0628]
This scholarship is provided to students with the highest cumulative average. Apply to Student Financial Services by May 15 by sending an email to awards@uoguelph.ca and include the name of the family member of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. This award may be held more than once, however, not in consecutive years. Preference will be given to students of current or retired P.S.A. members. Selection will be based on highest cumulative average.

**Donor(s):** Professional Staff Association

**Qualification(s):** Full-time students who are from the immediate family, part-time or contractual Professional/Managerial Group employees of the University and/or retired Professional/Managerial Group of the University of Guelph who have completed at least 5.0 credits and have a minimum 70% cumulative average.

**Amount:** 1 award of $1,500

### Project Hero Scholarship [I0979]
The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph

**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

### Psychology Core and Methodology Scholarship [I0345]
Provided by the Department of Psychology. Application is not required.

**Donor(s):** The Department of Psychology

**Qualification(s):** Student enrolled in the B.A. honours program or the honours specialization in the B.Sc. program majoring in Psychology who has completed PSYC*2010 and PSYC*2360 and the Psychology core course requirements.

**Amount:** 1 award of $200

### Psychology Honours Thesis Prize [I0343]
Selection will be based on the highest grade in PSYC*4880. Application is not required.

**Donor(s):** Department of Psychology

**Qualification(s):** All students registered in the BA program majoring in Psychology or the BSc majoring in Psychology: Brain and Cognition who have completed PSYC*4880.

**Amount:** 1 award of $200

### Psychology Senior Honours Prize [I0342]
The student with the highest cumulative average of the PSYC courses takes will be selected. Award may be held only once. Application is not required.

**Donor(s):** Department of Psychology

**Qualification(s):** Students registered in the BA or BSc programs majoring in Psychology who have completed at least 15.0 credits, including those prerequisite courses associated with the honours thesis PSYC*3370 and PSYC*3380.

**Amount:** 1 award of $200

### R.A. Fisher Statistics Scholarship [I0102]
Established to honour one of the founding fathers of statistics. Selection will be based on the highest combined average over 80% in STAT*2040 and STAT*2050 or equivalent. A student may be considered for this award only once. Application is not required.

**Donor(s):** Faculty, students and other affiliates of the Department of Mathematics and Statistics

**Qualification(s):** Students registered in a major offered by the Department of Mathematics and Statistics who have completed a minimum of 9.0 credits, but no more than 14.5 credits and have completed STAT*2040 and STAT*2050 or equivalent.

**Amount:** 1 award of $500

### R.C. Moffatt Memorial Scholarship in Mathematical Science [I0536]
This scholarship will be offered in odd numbered fiscal years (May to April). Selection will be based on highest cumulative average. This award is not tenable with any other awards from the Department of Mathematics and Statistics. Application is not required.

**Donor(s):** Estate of Professor R.C. Moffatt

**Qualification(s):** Students who have completed a minimum of 9.0 credits, but no more than 19.5 credits and are registered in a major offered by the Department of Mathematics & Statistics and achieved an 80% cumulative average.

**Amount:** 1 award of $1,500

### R.C. Moffatt Memorial Scholarship in Physics [I0535]
This scholarship is awarded in even numbered fiscal years (May to April) to the student with the highest cumulative average over 80%. This award is not tenable with any other Department of Physics scholarships. Application is not required.

**Donor(s):** Estate of Professor R.C. Moffatt

**Qualification(s):** Student who have completed a minimum of 10.0 credits up to a maximum of 19.75 credits and is enrolled in a physics major.

**Amount:** 1 award of $1,500

### RB Palmer Horticultural Scholarship [I1083]
These scholarships were established by RB Palmer in support of students who are interested in plant breeding, plant genetics and horticulture. RB Palmer was particularly inspired by Ornamental Horticulture, lilies and gladiolus in particular. Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter (no more than two pages) listing the courses you have completed that demonstrate your interest in horticulture, plant genetics or plant breeding. Selection will be based on highest cumulative average.

**Donor(s):** RB Palmer Horticultural Fund

**Qualification(s):** Students registered in a program offered by the Ontario Agricultural College who demonstrate an interest in horticulture, plant genetics or plant breeding. Preference will be given to students who demonstrate an interest in Ornamental Horticulture.

**Amount:** 1 award of $1,000
Resilience Scholarship (CEPS) [11126]

Applying by January 31st to the School of Engineering Awards Committee with a resume and a 500-word statement describing how the applicant has overcome adversity, demonstrated resiliency, leadership and perseverance, and how their actions have had a positive impact on others. Selection will be based on: 1. Resilience in response to personal life challenges or adversity (e.g., physical disability, financial constraints, socio-economic barriers); 2. Effective leadership, as evidenced through positions held, extracurricular activities, involvement on campus/in school and/or in the community; 3. Positive impact, on others, the School of Engineering, the University of Guelph, or the broader community, as evidenced in a 500-word statement. In the event of a tie, the student with the highest cumulative average will be selected. Award cannot be held more than once.

**Donor(s):** The Angel Gabriel Foundation

**Qualification(s):** Female students registered in any program within the School of Engineering, who have assumed roles of leadership and who have demonstrated resilience in response to personal life challenges or adversity (e.g., physical disability, financial constraints, socio-economic barriers).

**Amount:** 1 award of $5,000

Robert Harcourt Scholarships [10121]

Established, by the estate of Mrs.R. Harcourt in memory of the late Dr. Robert Harcourt. Selection will be based on highest cumulative averages for those entering year 3 and year 4. One scholarship will be awarded to year 3 entering students and one to year 4 entering students. Application is not required.

**Donor(s):** Estate of Mrs. R. Harcourt

**Qualification(s):** Students entering year 3 having completed 9.0 credits and year 4 having completed 14.0 credits in a program offered by the School of Environmental Sciences.

**Amount:** 2 awards of $750

Robert Orr Lawson Second Year Microbiology In-course Scholarship [10498]

Provided through a generous bequest from the estate of Robert Orr Lawson with matching support from the Department of Molecular and Cellular Biology to encourage study and research related to microbiology of foods. The scholarship is paid over three years in installments of $1,000. The second and third payments are contingent upon obtaining a minimum average of 77% over the previous two semesters of continued study in the major. Students who fail to qualify for a payment may re-qualify for the subsequent payment by obtaining a 77% or better average in the succeeding two academic semesters of full-time study. Apply to the Chair, Department of Molecular and Cellular Biology by May 15 if the intent is to continue the Microbiology major in the following September.

**Donor(s):** Department of Molecular and Cellular Biology and the estate of the late Robert Orr Lawson

**Qualification(s):** Student with a minimum 80% average in the B.Sc. program at the completion of the first two semesters of study who has declared a Microbiology major and has the highest cumulative average, providing that the average grade is 80% or greater for 5 credits. This scholarship may be held with any other awards, except the Microbiology Entrance Bursary, or any of the other Robert Orr Lawson Microbiology Scholarships.

**Amount:** 1 award of $3,000

Robert Orr Lawson Third Year Microbiology In-course Scholarship [10499]

Provided through a generous bequest from the estate of Robert Orr Lawson with matching support from the Department of Molecular and Cellular Biology to encourage study and research related to microbiology of foods. The scholarship is paid over two years in installments of $1,000. The second payments is contingent upon obtaining a minimum average of 77% over the previous two semesters of continued full-time study (5 credits) in the major. Apply to the Chair, Department of Molecular and Cellular Biology by May 15 if the intent is to continue the Microbiology major in the following September.

**Donor(s):** Department of Molecular and Cellular Biology and the estate of the late Robert Orr Lawson

**Qualification(s):** Student with a minimum 80% average in the B.Sc. program at the completion of the four first semesters of full-time study (10 credits) who has declared a Microbiology major and has the highest cumulative average, providing that the average grade is 80% or greater. This scholarship may be held with any other awards, except the Microbiology Entrance Bursary, or any of the other Robert Orr Lawson Microbiology Scholarships.

**Amount:** 1 award of $2,000

Ronald Ko Scholarship [10151]

This scholarship represents income generated by a trust fund established by Dr. Ko. One annual award is presented in the Winter semester. Application is not required.

**Donor(s):** Dr. Ronald Ko, Department of Integrative Biology, University of Hong Kong

**Qualification(s):** Student with the highest grade in the Integrative Biology of Invertebrates course ZOO*3700 in the Department of Integrative Biology, currently offered in the Fall semester.

**Amount:** 1 award of $500

Rosemont Scholarship in Food Animal Health and Welfare (OVC) [12199]

The Rosemont Scholarship in Food Animal Health and Welfare was established with proceeds from the “Excellence in Food” benefit dinner held at the Globe Restaurant in Rosemont, Ontario. The award recognizes the importance of animal health and welfare to rural life and sustainable food systems. Apply by letter detailing interest and involvement in activities related to food animal health and welfare, with two letters of support from veterinarians or faculty who have worked with the student in this area, to the Office of the Associate Dean, Students in the OVC fall awards competition. Selection will be based on the greatest demonstrated interest and involvement in food animal health and welfare. In the instance that more than one candidate is ranked equally by the OVC Awards Committee, the student with the highest cumulative grade in their Health Management courses to date will be awarded the scholarship.

**Donor(s):** Janice O’Born

**Qualification(s):** Students registered in the DVM program who demonstrate interest and involvement in food animal health and welfare.

**Amount:** 1 award of $1,600

RWDI Scholarship for Engineering Student Athletes [11135]

Established by Rowan Williams Davies & Irwin Inc. (RWDI), an engineering consulting firm specializing in the science of buildings and structures. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

**Donor(s):** RWDI

**Qualification(s):** Current members of any Gryphon varsity team who are registered in any program offered by the School of Engineering and who have achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student-athlete who has volunteered in the community.

**Amount:** 1 award of $3,500

School of Environmental Sciences Academic Prize [C0425]

The student with the highest cumulative average will receive this award. Application is not required.

**Donor(s):** The School of Environmental Sciences

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations, from any major in the School of Environmental Sciences (including: Bachelor of Science with a major in Environmental Biology; Bachelor of Science in Environmental Sciences with a major in Environmental Sciences; Bachelor of Bio-Resource Management with a major in Environmental Management)

**Amount:** 1 award of $1,000

School of Environmental Sciences Achievement Prize [C0426]

Apply to the O.A.C. Awards Office by April 1 with a letter of no more than 2 pages outlining contributions to student life and/or community activities. Selection will be made on academic achievement and demonstrated leadership ability.

**Donor(s):** The School of Environmental Sciences

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations, from any major in the School of Environmental Sciences with a minimum cumulative average of 70%.

**Amount:** 1 award of $1,000
**Scotiabank Scholarships in Leadership [I0834]**

Apply to the Department of Management Awards Committee by May 15 with: 1) A 500 word personal statement describing the impact of their leadership practice in a non-profit setting including the benefits both to the student and to the organization; 2) Reference letter(s) from the organization(s) in which the leadership practice took place. In the event of a tie, the award will go to the student with the highest cumulative average. Please submit your application by email to: dom.awards@uoguelph.

**Donor(s):** Scotiabank

**Qualification(s):** Students who have completed the Foundations of Leadership course (HROB*2010) and either completed the required 120 hours of leadership practice for the undergraduate Certificate in Leadership in a non-profit setting or are registered in the Leadership and Organizational Management major of the BComm program and have demonstrated exceptional leadership in a non-profit setting.

**Amount:** 5 awards of $1,000

---

**Second Year Nanoscience Scholarship [I0749]**

The scholarships will be awarded to the students with the highest cumulative average. No application necessary.

**Donor(s):** Dean’s Office College of Physical and Engineering Science

**Qualification(s):** B.Sc. students registered in the Nanoscience major who have completed between 7.50 and 9.75 credits with a minimum cumulative average of 80%.

**Amount:** 2 awards of $1,000

---

**Shur-Gain, Nutresco Canada Inc. Scholarship [I0307]**

Provided by Shur-Gain, a member of Nutresco Canada Inc. to a student that demonstrates high academic achievement and evidence of leadership and contribution to the university and/or community life. Apply by May 15 to the O.A.C. Awards Office with a letter of not more than 2 pages outlining leadership contributions. Awarded in the fall semester.

**Donor(s):** Shur-Gain

**Qualification(s):** Students registered in Animal Science or Animal Biology majors who have completed between 8.0 and 11.0 credits.

**Amount:** 1 award of $750

---

**Shutt Memorial Scholarship [I0257]**

In honour of Professor D.B. Shutt and Dr. F.T. Shutt. Not tenable with the Upjohn Award. Application is not required.

**Donor(s):** Greta M. Shutt, B.Sc. (H.E.)

**Qualification(s):** Awarded in the Winter semester to a student enrolled in the B.Sc. Microbiology major. The scholarship will be awarded on the basis of the highest cumulative average achieved over the 6 semester levels of the program.

**Amount:** 1 award of $500

---

**Society of Chemical Industries Prizes in Biochemistry [C0478]**

Application is not required.

**Donor(s):** Society of Chemical Industry

**Qualification(s):** Students who have convocated from the Biochemistry Honours program or the Biochemistry Co-op program during the fall or winter semesters or will be convocating in the summer of the current academic year with the highest cumulative average.

**Amount:** 1 award of an engraved plaque and a 1 year subscription to SCTs magazine

---

**Society of Chemical Industry Prizes [C0333]**

One plaque will be awarded to the Honours Chemistry student with the highest cumulative average and one plaque will be awarded to the student with the highest cumulative average in either the Biological Chemistry or the Applied Pharmaceutical Chemistry Honours programs. Application is not required.

**Donor(s):** Society of Chemical Industry

**Qualification(s):** Students who will be convocating in June or who have convocated from the Chemistry or Biological and Pharmaceutical Chemistry majors of the BSc program during the fall or winter semesters of the current academic year with the highest cumulative averages.

**Amount:** 2 awards of an Engraved plaque

---

**Sports Media and Sports Broadcasting Scholarships [I1035]**

Apply by May 15th to Student Financial Services by submitting a one page letter outlining sports media or sports broadcasting experience in the past year. Letters can be emailed to awards@uoguelph.ca. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minoring in Media and Cinema Studies and who have the highest GPA.

**Donor(s):** Rogers Media Inc.

**Qualification(s):** Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas. To be awarded to an undergraduate student first, then to a graduate student if no undergraduate students apply.

**Amount:** 2 awards of $2,500

---

**Stephanie Betts Memorial Scholarship [I0936]**

Established in memory of the late Stephanie Betts, Class of 2012. In honour of Stephanie’s time at U of G, the scholarship will be awarded to the student with the highest cumulative average. This award is not tenable with the CBS Dean’s Scholarship. Apply to the CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) by May 15 with a current resume.

**Donor(s):** Timothy McGillion and Janice Carter, Bob and Barb Bett.

**Qualification(s):** Students who have successfully completed a minimum of 10.0 credits and are registered in the Biomedical Sciences major of the B.Sc. program and who engaged in some community service in the previous 24 months as indicated in a resume.

**Amount:** 1 award of $1,000

---

**Stephanie Wilken Volunteer Scholarship [I0449]**

Established by the Wilken family in memory of Stephanie Wilken, BA 1995. Apply to Student Financial Services with letter indicating the kind and extent of volunteer activities at the Wellness Centre by October 1. Selection committee is the Senate Committee on Awards on the recommendation of the Student Wellness Educator at the Wellness Centre.

**Donor(s):** Bev and Darlene Wilken

**Qualification(s):** Student registered in any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre.

**Amount:** 1 award of $1,000

---

**Summerlee Humanitarian Scholarships [I0964]**

The Summerlee Humanitarian Scholarships are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues of global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a varsity athlete (varsity athletes should self-identify in their letter). While applicants who demonstrate past significant impacts in improving local communities/groups will be considered, preference will be given to applicants with strong previous proven international humanitarian efforts. Recipients must adhere to the University of Guelph’s Safe Travel Policy.

**Donor(s):** The Angel Gabriel Foundation

**Qualification(s):** Students registered in any program with no more than 17.0 credits completed who have demonstrated a commitment to humanitarian efforts including but not limited to those affecting refugees, displaced persons, and populations affected by conflict and natural disasters through volunteer positions, prior employment and/or extra-curricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.

**Amount:** 5 awards of $10,000 ($5,000 in each of the fall and winter semesters), plus an additional up to $4,000 to support travel costs
Susan Travers Memorial Scholarship [I0975]
Established by friends, family and colleagues in Alumni Affairs and Development in Memory of Susan Travers. Susan believed in the value of education. She worked for the University of Guelph as a member of Alumni Affairs and Development and in the Department of Business. She not only encouraged her children to pursue post-secondary education, but led by example, pursuing her university degree as a mature student. Preference will be given to students registered in CSAHS and LANG. Selection will be based on highest cumulative average. No application required.
Donor(s): The staff in Alumni Affairs and Development and Friends
Qualification(s): Students who were accepted to the University of Guelph as a “mature student” applicant and who are currently registered in any degree program.
Amount: 1 award of $1,000

T.D. Newton Memorial Scholarship [I0198]
Established in honour of Professor Ted Newton, the founding chair of the Department of Mathematics and Statistics. Selection is based on the highest average in a minimum of 4.0 credits. A student may be considered for this award only once. This award is not tenable with Leibniz/Newton Scholarship (I0156) or the Second Year Math and Statistics Scholarship (I0739). Application is not required.
Donor(s): Department of Mathematics and Statistics
Qualification(s): Students registered in a major offered by the Department of Mathematics and Statistics who have completed a minimum of 4.0 credits but no more than 8.5 credits.
Amount: 1 award of $1,500

Thermodynamics and Kinetics Scholarship [I0743]
The scholarship will be awarded to the student with the highest mark in the course. In the event of a tie, the scholarship will be awarded to the student with the highest grade in the final examination for the course. No application is necessary.
Donor(s): Dr. John Goddard
Qualification(s): BSc students registered in the Nanoscience or Chemical Physics major or any major offered by the Department of Chemistry who have completed CHEM*2820 with a grade of 80% or higher.
Amount: 1 award of $1,000

Third Year Nanoscience Scholarship [I0750]
The scholarships will be awarded to the students with the highest cumulative average. No application necessary.
Donor(s): Dean’s Office College of Physical and Engineering Science
Qualification(s): B.Sc. students registered in the Nanoscience major who have completed between 12.50 and 14.75 credits with a minimum cumulative average of 80%.
Amount: 2 awards of $1,000

Thomas H. Peters Scholarship [I0233]
Application is not required.
Donor(s): Friends and associates of Thomas H. Peters
Qualification(s): Student in any academic program of the University who has completed courses in Land Reclamation (e.g. CROP*2280, SOIL*3200), with a minimum 10.0 credits completed. Applicants must have a minimum of 70% cumulative average and have demonstrated an interest and aptitude in the area of crops and land reclamation.
Amount: 1 award of $500

Tony Anthony Prize in Comparative Vertebrate Anatomy [I0282]
In memory of the late E.H. Anthony, Professor in the former Department of Zoology. One award will be made for each semester in which the course is offered. Application is not required.
Donor(s): Tony Anthony Memorial Fund
Qualification(s): Student who achieves the highest grade in course ZOO*2900, Vertebrate Structure and Function.
Amount: 1 award of $500

Toronto District Beekeeper’s Association Scholarship [I0285]
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application is not required.
Donor(s): Mr. Jack Robinson
Qualification(s): The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.
Amount: 1 award of $500

Tucker Scholarship for Women in Mathematical Science [I0483]
Established by Emma Tucker, B.Sc. Statistics, 1996, to encourage women in the study of Mathematics and Statistics. Selection will be based on high cumulative average and contributions made to student life within the department. Apply by May 15th to the Department of Mathematics and Statistics main office with a letter outlining contributions to student life within the department.
Donor(s): Emma Tucker, B.Sc. ’96
Qualification(s): Female students registered full-time in a major offered by the Department of Mathematics and Statistics who have completed a minimum 9.0 credits and demonstrated contributions to student life within the department.
Amount: 1 award of $500

United Steelworkers Local 4120 Scholarship [I0293]
Apply to Student Financial Services by January 31 and provide the name of the USWA member and relationship to the applicant. If there is more than one eligible candidate, the award will go to the one who has attained the highest relative class standing in his or her previous full-time semester.
Donor(s): United Steelworkers LU4120
Qualification(s): Student who is a member or former member, or who is from the immediate family of a member of United Steelworkers LU 4120, and who is entering semester 2, 3, or 4 of a degree or diploma program in the Winter semester with a minimum 70% cumulative average.
Amount: 1 award of $1,000

University of Guelph Alumni Legacy Scholarship [I0735]
Funded through donations made to the University of Guelph Alumni Memorial Fund in memory of deceased alumni. The recipient will be selected based on academic achievement and volunteer contributions to the University of Guelph community. Apply to Student Financial Services by May 15 with a cover letter indicating name, degree and year of graduation of alumna/alumnus relative and a resume or summary of leadership and volunteer contributions to the University of Guelph community.
Donor(s): Various donors c/o University of Guelph Alumni Association Memorial Fund
Qualification(s): Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with both a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumna/us of the University of Guelph or its founding colleges.
Amount: 1 award of $1,000

University of Guelph Retirees Association Scholarship [I0569]
Established in 2007 to acknowledge in-course student achievement. The student having the highest cumulative average will be selected and in the event of a tie, the student with the highest average in the last two semesters of full-time studies will be chosen. Apply by May 15th to Student Financial Services with a letter indicating name of and relationship to a retiree of the University of Guelph. Recipients cannot hold this scholarship and another scholarship greater than $1,500 at the same time.
Donor(s): University of Guelph Retirees Association (U.G.R.A.)
Qualification(s): Students with a minimum cumulative average of 75% registered in a degree program who are related to a retiree of the University of Guelph as child, grandchild or great grandchild who have not held the scholarship before.
Amount: 1 award of $1,500

Van Straalen and Van Der Hoeven Memorial Scholarship [I0296]
The scholarship will be awarded to the student who has demonstrated academic achievement and exemplary leadership. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca one-page summary demonstrating leadership skills gained through participation in extracurricular activities, both within the university and the broader community. Preference will be given to students who have completed between 3 and 10 credits at the time of application for the award.
Donor(s): Mr. & Mrs. J. Van Straalen & family and Mr. & Mrs. Hans Van Der Hoeven & family
Qualification(s): Students registered in any program who have achieved a minimum of 80% cumulative average and participated in extra-curricular activities.
Amount: 1 award of $2,000

W. H. Boyd Scholarship [I0335]
Established by the friends of Professor W.H. Boyd. Application is not required.
Donor(s): Douglas L. Woolley, M.D. & B.Sc.(H.K) Alumni Association
Qualification(s): Student enrolled in the Human Kinetics major who has completed Human Anatomy and who has made leadership contributions to the University or outside community.
Amount: 1 award of $1,500
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Amount</th>
<th>Donor(s)</th>
<th>Qualification(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. Harold Minshall Scholarship [I0451]</td>
<td>1 award of $1,000</td>
<td>O.A.C. Alumni Foundation on behalf of Dr. W.H. Minshall</td>
<td>O.A.C. students in the B.Sc. (Agr.), B.Sc. (Env.) or B.Sc. degree programs who have completed minimum of 15 credits, and one of the following courses in the previous fall, winter or summer semester: CROP<em>240, ENV5</em>320, ENV5<em>3210, ENV5</em>4100, ENV5<em>4180, and ENV5</em>4190.</td>
</tr>
<tr>
<td>W.C. Winegard Medal [C0311]</td>
<td>1 award of a Gold medal</td>
<td>The Board of Governors' of the University</td>
<td>Students who are graduating in June, or who have graduated in the previous two convocations who excel both academically and in contributions made to the university and community life.</td>
</tr>
<tr>
<td>W.N. Vaughan Medal [C0299]</td>
<td>1 award of a Medal</td>
<td>Friends of Walter N. Vaughan</td>
<td>Student senator who has high academic standing and who has made a substantial contribution to student life and to the University, particularly through involvement in and commitment to Senate activities.</td>
</tr>
<tr>
<td>Wally Fraser Mathematical Science Scholarship [I0544]</td>
<td>1 award of $1,000</td>
<td>The Department of Mathematics and Statistics and (retired) Professor Dixon More, C.E.P.S.</td>
<td>Students who are registered in a major offered by the Department of Mathematics &amp; Statistics who have completed a minimum of 9.0 credits, but no more than 14.5 credits.</td>
</tr>
<tr>
<td>Warren Stein Memorial Scholarship [I0955]</td>
<td>1 award of $1,000</td>
<td>Canadian Swine Breeders Association</td>
<td>Students registered in any program offered by OAC who have completed 10.0 credits or more and who are engaged in swine related studies.</td>
</tr>
<tr>
<td>Weiner Family Mathematical Science Scholarships (First Year) [I1055]</td>
<td>4 awards of $1,000</td>
<td>Jack Weiner</td>
<td>Students registered in a major offered by the Department of Mathematics and Statistics who have completed between 4.0 and 8.5 credits, with a minimum 75% cumulative average.</td>
</tr>
<tr>
<td>Weiner Family Mathematical Science Scholarships (Second Year) [I1047]</td>
<td>1 award of $1,500</td>
<td>Jack Weiner</td>
<td>Students registered in a major offered by the Department of Mathematics &amp; Statistics who have completed a minimum of 9.0 credits, but no more than 14.5 credits, with a minimum 75% cumulative average.</td>
</tr>
<tr>
<td>Weiner Family Mathematical Science Scholarships (Third Year) [I1048]</td>
<td>1 award of $1,500</td>
<td>Jack Weiner</td>
<td>Students registered in a major offered by the Department of Mathematics &amp; Statistics who have completed a minimum of 14.0 credits, but no more than 19.5 credits, with a minimum 75% cumulative average.</td>
</tr>
<tr>
<td>Wilma Hollywood Memorial Scholarship [I0509]</td>
<td>1 award of $200</td>
<td>Department of Psychology</td>
<td>Student majoring in Psychology in either the B.A. or B.Sc. program who has achieved the highest cumulative average in the core courses.</td>
</tr>
<tr>
<td>In-course Scholarships with Financial Need</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alf and Mary Hales Undergraduate Scholarship in Food Science [I4510]</td>
<td></td>
<td>Alf and Mary Hales, with the assistance of the Ontario government's OSOTF program have established this scholarship to Food Science students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. To be considered for this award you must indicate it on the N.A.F. and include a statement outlining your interest in Meat Science. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td>Athletic Club Scholarship for Human Kinetics [I4404]</td>
<td>1 award of $1,400</td>
<td>Athletic Club Group with matching funding through the Ontario Trust for Student Support program</td>
<td>Full-time students registered in the Human Kinetics major who have completed at least 10.0 credits, with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).</td>
</tr>
</tbody>
</table>

Last Revision: July 4, 2019
Barbara A. Bowen Scholarship [I4390]
Established by Barbara A. Bowen, MAC ’57. Preference will be given to students registered in Department of Family Relations and Nutrition. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

Donor(s): Barbara A. Bowen with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students who have a minimum 75% average and are registered in any degree program in the College of Social and Applied Human Science with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $5,500

Bernice and Bruce Sells Leadership Scholarship [I1011]
Created by Dr. Bruce Sells, the Dean of the College of Biological Science, 1983-1995, and his wife Mrs. Bernice Sells. Selection of the student recipient will be based on demonstrated initiative and innovation through significant involvement in extracurricular and leadership activities. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and a letter describing extra-curricular and leadership activities.

Donor(s): Dr. Bruce Sells and Mrs. Bernice Sells
Qualification(s): Students registered in any program offered by the College of Biological Science with a minimum cumulative average of 85% who have completed a minimum of 12.0 credits, have demonstrated financial need and who also demonstrate initiative and innovation through significant involvement in extra-curricular and leadership activities.

Amount: 1 award of $1,000

Brian Kenneth Howard Memorial Scholarship [I4548]
Established by Kenneth and Irene Howard in memory of their son, Brian Kenneth Howard. Awarded to a student assessed as having financial need with a preference given to students from York, Durham or Simcoe counties. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Kenneth and Irene Howard with matching funding through the Ontario Trust for Student Support program
Qualification(s): Student registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $3,000

C.B.S. ACCESS Scholarships [I4526]
Established by Alumni and friends of C.B.S., with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

Donor(s): Alumni and friends of C.B.S. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any major in C.B.S. with a minimum of 10.0 credits completed and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $500

C.E.P.S. Dean's Scholarship - ACCESS [I4527]
Established with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. This award may be held only once. ACCESS AWARD

Donor(s): Established by a number of industrial, commercial and public sector corporations with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with demonstrated financial need, registered in an honours program offered by the College of Engineering & Physical Sciences who have completed a minimum of 4.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $1,000

CEPS Computer Science ACCESS Scholarships [I4551]
Established by the School of Computer Science, friends and alumni with the aid of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): School of Computer Science, friends and alumni with the aid of the Ontario government's OSOTF program.
Qualification(s): Students registered in an honours program offered by the College of Engineering & Physical Sciences who have completed 4.0 credits, with demonstrated financial need. Preference will be given to students in the BCOMP program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award. OSOTF award (see General Statements on Awards).

Amount: 1 award of $1,000

CIBC Health and Science Scholarships [I4402]
Applications will be accepted beginning Fall 2020. Preference will be given in the following order: i) students who completed a summer Student Research Assistantship (S.R.A) under a University of Guelph faculty member; and ii) students who participated in cancer research-related activities. Apply by October 7 to Student Financial Services by submitting a completed Financial Need Assessment Form and include a letter outlining extracurricular activities in human health and, if applicable, highlighting cancer-related activities. ACCESS AWARD

Donor(s): CIBC with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in any major offered by the College of Biological Science who have completed at least 5.0 credits with a minimum cumulative average of 75% and who have participated in extracurricular activities related to human health. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 2 awards of $5,000

City of Guelph 175th Anniversary Scholarship [I0515]
Funded by a leadership gift from the City of Guelph and donations from business and community leaders, this scholarship was established in 2002. Apply to Student Financial Services by October 7 with a letter describing volunteer activities, one reference letter from an individual familiar with the volunteer and/or community service contributions, and a completed Financial Need Assessment Form (N.A.F.). Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need. This award may be held only once.

Donor(s): The Guelph Community Foundation
Qualification(s): Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70.0% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.

Amount: 1 award of $2,000

Dr. Kenneth & Nancy Lawless [I4552]
Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

Donor(s): Dr. Kenneth W. Lawless with matching funding through the Ontario Trust for Student Support program
Qualification(s): Student registered in any program offered by the Ontario Agricultural College who has completed at least 5 credits with a minimum cumulative average of 75% and has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $2,700
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Description</th>
<th>Qualification(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Earl B. MacNaughton C.E.P.S. ACCESS Scholarships [I4172]</strong></td>
<td>Established by friends, faculty, staff, alumni and students of the University to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical and Engineering Science, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td>Students currently registered in an honours program in the College Engineering and Physical Sciences with high academic standing, demonstrated financial need, and who have completed a minimum of 15.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td>2 awards of $1,500</td>
</tr>
<tr>
<td><strong>Eleanor Morgan &amp; Bill Archibald Scholarships [I4540]</strong></td>
<td>The family of Eleanor and Bill Archibald, with the assistance of the Ontario government’s OSOTF program, provide this scholarship in memory of their parents. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining community involvement to Student Financial Services by October 7. ACCESS AWARD.</td>
<td>Students registered in any program with a minimum of 5.0 credits who have cumulative 70% average, have demonstrated community involvement, and financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (See General Statements on Awards).</td>
<td>1 award of $2,500</td>
</tr>
<tr>
<td><strong>Erin Demers Memorial Scholarship [I0406]</strong></td>
<td>The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.), along with one supporting reference letter from a Residence Assistant, Residence Manager, or Residence Officer.</td>
<td>Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.</td>
<td>1 award of $1,800</td>
</tr>
<tr>
<td><strong>Euclid-Hitachi Scholarships [I4517]</strong></td>
<td>Established by Euclid-Hitachi of Canada Ltd., with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD</td>
<td>Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td>2 awards of $1,500</td>
</tr>
<tr>
<td><strong>Graham Family Incentive Scholarship [I4506]</strong></td>
<td>Provided by Harvey Graham (O.A.C. ’39) with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD</td>
<td>Students entering the fourth year of a four year degree program, maintaining at least a 70% program average and demonstrating financial need, who have previously received the Harvey Graham Bursary. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td>1 award of $6,000</td>
</tr>
<tr>
<td><strong>Guelph Campus Co-operative Centennial Scholarship [I0867]</strong></td>
<td>In recognition of the Guelph Campus Co-operative’s centennial anniversary and the students who founded it, this scholarship is awarded to a student who has demonstrated financial need. Preference will be given to students who are members of the Guelph Campus Co-operative. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form and a photocopy of your valid co-operative membership card.</td>
<td>Students registered in any program at the University of Guelph who have completed a minimum of 5.0 credits with a minimum cumulative average of 75% and have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td>2 awards of $1,200</td>
</tr>
<tr>
<td><strong>Hagen Undergraduate Scholarship [I4525]</strong></td>
<td>Established by Rolf Hagen, founding president of Rolf C. Hagen Inc., Canadian pet food and products supplier, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Awarded to the students with the highest cumulative average. ACCESS AWARD</td>
<td>Students beyond semester 6 with demonstrated financial need. Awarded to the students with the highest cumulative averages in any major in the College of Biological Science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td>a number of awards of $1,000</td>
</tr>
</tbody>
</table>
Hsing-So Chow Yuen Leadership Scholarship [14400]

This award was established in memory of Hsing-So Chow Yuen, Stacey Yuen’s (CBS BSc Hon 2003 Alumni) late Grandmother. Apply to Student Financial Services by October 7 with a University of Guelph Financial Need Assessment Form along with a statement of up to 500 words outlining leadership and involvement in volunteer activities. Selection will be based on demonstrated exemplary leadership through involvement with on campus or off campus volunteer activities (student associations/charitable or non-profit organizations) as described in a statement. ACCESS AWARD.

Donor(s): John and Agnes Yuen with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students registered in a program offered by the College of Biological Science who have completed between 5.0 and 17.5 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $2,500

Janet M. Wood Scholarship [11078]

Established by the Department of Molecular and Cellular Biology and the friends, colleagues and former students of Professor Janet M. Wood to honour her career; rich in service to others, productive in the pursuit of new knowledge, and tireless in her teaching and mentoring efforts. Apply with a completed Financial Need Assessment Form (N.A.F.) by October 7 to Student Financial Services. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Dr. Jocelyn Münzer

Qualification(s): Students registered in the Bachelor of Science program with a major in Biochemistry or Microbiology who have completed a minimum of 10.0 credits and who have demonstrated financial need. Selection will be based on the student with highest cumulative average.

Amount: 1 award of $1,000

Jay Majithia Scholarship [14518]

Provided to honour Professor Jay Majithia, in recognition of his support and leadership while a faculty member in the Department of Computing and Information Science, by Margaret Middleton, C.E.P.S. ’86 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7 and attach a letter stating research interest and/or involvement. ACCESS AWARD.

Donor(s): Mrs. Margaret L. Middleton with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Computer and Information Science students with demonstrated financial need who have a minimum cumulative program average of 70%. Preference will be given to eligible students who are applying for, or participating in, departmental research, including a special project or an independent study option. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,000

Jessica Marie Hamather Memorial Scholarship [11017]

Established in loving memory of Jessica Marie Hamather (BSc ’15), Apply to Student Financial Services by October 7h with Financial Need Assessment form along with letter outlining extracurricular activities and volunteerism. Selection will be based on greatest financial need and students can only hold this award once.

Donor(s): Timothy and Maria Hamather

Qualification(s): Canadian citizens or permanent residents registered in any program offered by the College of Biological Science who have completed between 5.0 and 18.0 credits, have participated in extracurricular activities or volunteerism and who have demonstrated financial need. Preference will be given to students registered in the Biomedical Science major.

Amount: 1 award of $1,000

Keith Ronald Undergraduate Scholarship [14547]

Established in honour of Professor Keith Ronald, founding Dean of the College of Biological Sciences, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Selection will be made based on the student with the highest cumulative average and demonstrated financial need. This award may only be held once. ACCESS AWARD.

Donor(s): Friends and Colleagues of Professor Keith Ronald with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time BSc students majoring in Marine and Freshwater Biology, with a minimum cumulative average of 75%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $4,500

Lilian and James Allan Scholarship [10956]

Selection will be based on highest cumulative average and financial need. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): James N. Allan Family Foundation

Qualification(s): Students registered in the BSc program majoring in Food Science with a minimum cumulative average of 70% who have completed a minimum of 4.0 credits and have demonstrated financial need.

Amount: 1 award of $2,500

MAC 1954 Scholarship [10911]

Preference will be given to students registered in the department of Family Relations and Applied Nutrition. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Class of MAC 1954

Qualification(s): Students registered in any degree program offered by the College of Social and Applied Human Science with a minimum 75% average with demonstrated financial need.

Amount: 1 award of $1,500

MacNaughton ACCESS Scholarship in Physics [14523]

Established by Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science, and faculty, staff and alumni of the Department of Physics, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Earl B. MacNaughton and faculty, staff and alumni of the Department of Physics with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students with demonstrated financial need who are in second year or beyond of a major physics program with a minimum cumulative average of 80%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 5 awards of $1,000

McCormick Canada Inc. Food Science Scholarship [10410]

Provided by McCormick Canada Inc. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): McCormick Canada Inc.

Qualification(s): Students in the B.Sc. Food Science major who have financial need. In-course students must have maintained at least a 70% cumulative average, while first semester students must have had a 70% average in high school science courses. Students may hold the award once unless there are no other eligible candidates in a subsequent year.

Amount: 1 award of $2,000
Nora Spence Memorial Scholarship [I4394]

This scholarship was created by George and Jane Spence in memory of their daughter Nora Spence, O.A.C. BSc ’06 with the aid of the Ontario government’s OTSS program. Selection will be based on high academic achievement. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Jane and George Spence with matching funding through the Ontario Trust for Student Support program
Qualification(s): BSc students registered in a major offered by O.A.C. who have a minimum cumulative average of 75% and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 1 award of $1,750

O.A.C. ’52 Scholarships [I4538]

Offered by the class of O.A.C.’52, with the assistance of the Ontario government’s OSOTF program. Apply by letter highlighting involvement in leadership and community activities and/or university life along with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): O.A.C. ’52 with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. students enrolled in the B.Sc.(Agr.), B.Comm., B.Sc, or B.Sc.(Env.) programs who have demonstrated financial need, who are in good academic standing and who have demonstrated leadership. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 5 awards of $3,250

R. Douglas and Kathleen Kennedy Scholarship in O.A.C. [I0547]

Douglas (O.A.C. ’39) and Kathleen (MAC ’39) Kennedy met at a “hop” on campus in 1937 and later married. They established this scholarship to celebrate their love and their 62 years of marriage. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy
Qualification(s): This scholarship will be awarded to a student in O.A.C. with high academic achievement and demonstrated financial need.
Amount: 1 award of $1,200

Residence Life Staff Scholarship [I0697]

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date.

Donor(s): Student Housing Services
Qualification(s): Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program.
Amount: 2 awards of $500

Returning Student Residence Scholarship [I0696]

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must have resided in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award.

Donor(s): Student Housing Services
Qualification(s): Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average.
Amount: 3 awards of $500

Robert S. and Ethelyne L. Fulkerson Scholarship [I0382]

Established by Professor Robert S. Fulkerson, a former faculty member in the Department of Crop Science and graduate of O.A.C. in 1946, and his wife Ethelyne. Apply by October 7 with a completed In-Course Financial Need Assessment Form (N.A.F.) to Student Financial Services. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Professor Robert S. and Ethelyne L. Fulkerson
Qualification(s): Students enrolled in the Bachelor of Science in Agriculture with a major in CHATS or the Bachelor of Science with a major in Plant Science who have completed at least 14.0 CRD with at least a 70% cumulative average, an interest in crop production and have demonstrated financial need are eligible for this award.
Amount: 1 award of $1,500

Robert, Louis and Helen Shaw Memorial Degree Scholarships [I4520]

Established by the Shaw Scholarship Committee with the assistance of the Ontario government’s OSOTF program. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): The Shaw Scholarship Committee with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in the BSc(Agr), BLA, BSc with a major in Plant Agriculture or BBRM.EQM programs with demonstrated financial need, and a 70% cumulative average Preference will be given first to first year students from Peterborough County and then to students from Peterborough County. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

Scottish Studies Foundation Scholarship [I4541]

Provided with the assistance of the Ontario government’s OSOTF program. The recipient will be selected on the basis of the number of and grades in the requisite courses listed as well as overall cumulative average to that point in the student’s career. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and attach an unofficial transcript. To be considered for this award, you must list it on your N.A.F. ACCESS AWARD

Donor(s): Scottish Studies Foundation and private donors with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students who have completed a minimum 10.0 credits and has taken or is taking HIST*2000 or HIST*2500, and at least one of the following: HIST*3030, HIST*3140, HIST*3530, HIST*4040, or HIST*4050. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $4,000

Stephen Safe Scholarships in Chemistry [I4409]

Wellington Laboratories and Mr. Brock Chittim, with the assistance of the Ontario government’s OSOTF program to honour the achievements of Prof. Stephen Safe, a former faculty member at the University of Guelph. Apply with a completed Financial Need Assessment Form (N.A.F.), to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Selection will be based on financial need and academic achievement. From the pool of eligible applicants, the Year 4 student with the highest cumulative average in at least three 3000-level chemistry courses taken in Year 3 or, for a Year 3 student, three 2000-level chemistry courses taken in Year 2. ACCESS AWARD.

Donor(s): Mr. Brock Chittim, and Wellington Laboratories
Qualification(s): Students registered in any major offered by the Department of Chemistry who have completed a minimum of 15.0 credits and who have demonstrated financial need. Preference will be given to Year 4 students. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 2 awards of $2,500

Last Revision: July 4, 2019
2019-2020 Undergraduate Calendar
<table>
<thead>
<tr>
<th><strong>Tara Lynn Giuliani Memorial Scholarship [I0375]</strong></th>
<th><strong>Archie and Isabelle (Cook) Rintoul O.A.C. Bursary [I3060]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Funded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form. Selection is based on financial need.</td>
<td>Offered by Archie and Isabelle (Cook) Rintoul of O.A.C. ‘26 and MAC ‘27 respectively. Apply with a completed Financial Need Assessment Form (N.A.F.) by October 7 to Student Financial Services. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Tara Lynn Giuliani Foundation at the Hamilton Community Foundation</td>
<td><strong>Donor(s):</strong> Archie and Isabelle (Cook) Rintoul</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services and who have demonstrated financial need. Preference given to students with a visual impairment.</td>
<td><strong>Qualification(s):</strong> Students registered in the department of Environmental Biology in the B.Sci., B.Sci.(Agr.) or the B.Sc.(Env.) degree programs who have completed a minimum of 10.0 credits and who have demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000</td>
<td><strong>Amount:</strong> Several awards of varying amounts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Walter and Marion MacDougald Scholarship [I4530]</strong></th>
<th><strong>Beef Farmers of Ontario Degree Bursaries [I3506]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the family of Walter and Marion MacDougald on the 50th wedding anniversary of their parents, in recognition of their gift of life-long learning to their five children, with the assistance of the Ontario government's OSOTF program. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter that includes a statement that outlines your interests in food supply, utilization, farmland conservation or woodland management. Preference will be given to students enrolled in a program involved in food supply or utilization, farmland conservation or woodland management. ACCESS AWARD.</td>
<td>Prior to 2017-18, this bursary was called the Ontario Cattlemen's Association Degree Bursaries. Selection will be based on financial need. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.) Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Doug MacDougald, D.V.M. with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td><strong>Donor(s):</strong> Beef Farmers of Ontario and the O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students demonstrating financial need with a minimum of 10.0 credits and less than 15.0 credits and who are in the following programs/majors/minors: BASc, BSc(Agr), BSc(Env), BSc(Food Science, Animal Biology, Nutrition, or Forest Science), or D.V.M., having a minimum cumulative average of 70%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td><strong>Qualification(s):</strong> Students with demonstrated financial need who have completed a minimum of 8.0 credits in the B.Sc. (Agr.), B.Comm.(Food and Agricultural Business), B.Sc.(Animal Biology) or B.Sc.(Food Science) program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $2,400</td>
<td><strong>Amount:</strong> Several awards of varying amounts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>William &amp; Nona Heaslip Scholarship [I0589]</strong></th>
<th><strong>Bill Mactaggart Memorial Scholarship in Small Ruminant Health Management [I2204]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7. Recipients of this award can have this award renewed for up to 3 years provided they continue to demonstrate financial need and maintain a minimum 70% cumulative average of full-time (minimum 80% of a full course load) study. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
<td>This award is in memory of Bill Mactaggart who lived in Guelph/Eramosa where he raised champion purebred Suffolk sheep with passion and expertise for improving the health and genetics of his show flock. He was a Guelph graduate and an innovator who approached farming using the scientific method. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services, by October 7 and submit a written application (maximum 600 words) detailing experience with small ruminants and how this experience has inspired interest in promoting small ruminant health in the Fall during the call for applications from the Dean's office.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> The William and Nona Heaslip Foundation</td>
<td><strong>Donor(s):</strong> Leslie Mactaggart</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students that have completed 4.0 credits but no more than 6.0 credits in any degree program; are a Canadian citizen/permanent resident; have a minimum 70% cumulative average; and demonstrate financial need.</td>
<td><strong>Qualification(s):</strong> DVM students with demonstrated financial need and an interest in promoting the health and welfare of small ruminants are eligible. Selection will be based on the student’s experience with small ruminants, such as handling, showing, rearing, etc., as evidenced through participation in activities such as 4H or agricultural fairs, as well as a recommendation from OVC Ruminant Field Services.</td>
</tr>
<tr>
<td><strong>Amount:</strong> 2 awards of $15,000</td>
<td><strong>Amount:</strong> 1 award of $5,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Yeandle Family Scholarships [I3546]</strong></th>
<th><strong>Brinson Partners Inc. Bursaries [I3526]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided by the Estate of Audrey Yeandle, a Mac’25 graduate and life-long supporter of the University, with the assistance of the Ontario government's OSOTF program. Awards will be made on the basis of financial need and academic achievement. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td>Brinson Partners Inc., with the assistance of the Ontario government's OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> The Estate of Audrey Yeandle with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td><strong>Donor(s):</strong> Brinson Partners Inc. with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in a program in the College of Social and Applied Human Sciences with a minimum cumulative average of 70%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td><strong>Qualification(s):</strong> Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several awards up to $2,000</td>
<td><strong>Amount:</strong> 2 awards of $1,500</td>
</tr>
</tbody>
</table>

### In-course Bursaries

<table>
<thead>
<tr>
<th><strong>Acer Saccharum Bursary [I3083]</strong></th>
<th><strong>Burnbrae Farms Bursaries [I3525]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and confirmation of registration with Student Accessibility Services.</td>
<td>Established by Burnbrae Farms, with the assistance of the Ontario government's OSOTF program to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement explaining interests in poultry science to Student Financial Services by October 7. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Steven Ardron and Celine Batterink</td>
<td><strong>Donor(s):</strong> Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any degree program at the University of Guelph, who have demonstrated financial need and are registered with Student Accessibility Services.</td>
<td><strong>Qualification(s):</strong> Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $1,000</td>
<td><strong>Amount:</strong> 2 awards of $1,000</td>
</tr>
</tbody>
</table>
Campbell-Ouellette Family Bursary [I3098]
Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family’s broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Dr. Malcolm Campbell
Qualification(s): Students registered in any program with demonstrated financial need.
Amount: 1 award of $2,000

Catherine and Brian Berg Memorial Bursary [I3542]
Established by the families of Brian and Cathy Berg, with the assistance of the Ontario government’s OSOTF program Apply by completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Families of Cathy and Brian Berg with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): C.B.S. student with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $800

Class of ’72: 25th Reunion Bursaries [I3512]
Established by the Class of ’72: 25th Reunion Fund with the assistance of the Ontario government’s OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Class of ’72: 25th Reunion with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 3 awards of $1,000

Class of O.A.C. ’33 Bursaries [I3531]
Established by the class of O.A.C. ’33 on the occasion of their 65th Anniversary, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Class of 1933 (in honour of the late Prof. W.I. Squirrell) with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

Class of O.A.C. ’36 Bursaries [I3501]
Established by the Class of O.A.C. ’36 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Class of 1936 with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): An O.A.C. degree student enrolled in any degree program who has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: several awards of varying amounts

David Havoic Bursary [I3087]
Established by the Havoic family, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to the student with the greatest financial need. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and attach a letter from Student Accessibility Services confirming registration and physical disability.

Donor(s): Debbie and David Havoic
Qualification(s): Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.
Amount: 1 award of $1,000

David R. Leach Memorial Bursary [I3534]
Established by Dr. David Leach by his family, with the assistance of the Ontario government’s OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. ’73 and graduated with a B.Sc. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7. ACCESS AWARD

Donor(s): Mrs. Deborah Leach-Sartor with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students who are physically disabled as determined by the Student Accessibility Services with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $1,000

Denis and Patricia Yates Bursary [I3097]
Established by Charlotte Yates in memory of her parents who were strong advocates for the value of education in society. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Dr. Malcolm Campbell
Qualification(s): Students registered in any program with demonstrated financial need.
Amount: 1 award of $2,000

Donna Demering-Pree Bursary [I3082]
Established by Mrs. Donna Pree, Mac BHSc 1967, for first generation students registered in any program offered by the College of Social and Applied Human Sciences. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form and a statement identifying as a first-generation student.

Donor(s): Mrs. Donna Pree, Mac BHSc 1967
Qualification(s): students registered in any program offered by the College of Social and Applied Human Sciences with demonstrated financial need and a minimum of 10.0 completed credits. Preference will be given to students registered in BASc. With a major in Applied Human Nutrition or BASc. With a major in Child, Youth and Family.
Amount: 1 award of $1,000

Dr. Gordon MacLeod Memorial Bursary [I3093]
Established in memory of Dr. Gordon MacLeod and in dedication to his interest in the dairy industry. Apply to Student Financial Services (awards@uoguelph.ca) with a completed Financial Need Assessment Form (N.A.F.) and a letter reflecting on your interest in dairy related studies by October 7. Please be sure to include your name, student ID number, your program of study and the award you’re applying to on your letter and application. Please email your application to awards@uoguelph.ca and include the award name and ID number in the subject line.

Donor(s): Cynthia MacLeod
Qualification(s): Students registered in any degree program offered by OAC, who have financial need and who can demonstrate an interest in dairy related studies.
Amount: 1 award of $3,000

Elizabeth Burton Bursaries [I3503]
Mrs. Elizabeth Burton, with the assistance of the Ontario government’s OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

F. Elsie M. Brown and William R. Brown Bursary [I3091]
Supported by a gift from the Estate of Fredelene Elsie May Brown and her predeceased husband, William Robert Brown. Apply to Student Financial Services by Oct 7 with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Estate of Fredelene Elsie May Brown
Qualification(s): Students registered in any program offered by the OAC who have completed at least 10.0 credits and demonstrate financial need.
Amount: 2 awards of $2,500
Flower Deco Bursary [I3095]

Apply by October 7 with a completed Financial Need Assessment Form to Student Financial Services and a letter explaining your interest in horticulture. In your letter, please include a list of the courses you have taken at U of G that demonstrate your interest in horticulture. Selection will be based on financial need.

Donor(s): Mr. Young-Hoon Song

Qualification(s): Students registered in any of the following programs are eligible for this award: Bachelor of Science in Agriculture with a major in Crop, Horticulture and Turfgrass Sciences or Bachelor of Science in Agriculture with a major in Honours Agriculture, or Bachelor of Science with a major in Plant Science or Bachelor of Landscape Architecture. Preference will be given to students with an interest in Horticulture.

Amount: 1 award of $2,000

Food Science Co-op Bursaries [I3509]

Established by the Knechtel Scholarship Fund and the Toronto section of CIFST, with the assistance of the Ontario government's OSOTF program, to assist with Co-op fees. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Knechtel Scholarship Fund and the Toronto section of Canadian Institute of Food Science Technology with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students registered in the Food Science Co-op program in their first semester of academic study and confirmed registration in the Food Science Co-op program in the following winter semester. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of various amounts

George and Margaret J. Miles Memorial Bursary [I3544]

Established by the family to honour the memory of the parents, George and Margaret J. Miles, life long supporters of education. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter describing involvement in extra-curricular activities to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): Established by the Miles Family with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): All undergraduate arts and social science students with demonstrated financial need who are in or beyond semester 3 and have at least a 75% cumulative average in all courses completed to date are eligible to apply. Preference will be given to students who participate and provide leadership in extra-curricular or community activities (examples include student government, charitable organization, volunteer work, Big Brothers/Sisters, contributions to school and/or community, etc.). Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $2,000

Gordon B. Henry Bursaries in Food Science [I3540]

Established in memory of O.A.C. graduate '34 Gordon B. Henry by his family and associates with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Gordon B. Henry, O.A.C. '34 with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students registered in Food Science with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

Gryphon Investment Council Bursaries [I3513]

Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,500

Guelph Compassionate Health and Dental Bursary [I3061]

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph's mandatory Student Health Plan, University of Guelph's Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment form; (2) a letter from physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and it's impact on the student's studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) Insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

Donor(s): Student Health and Dental Plan Reserve

Qualification(s): Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student's academic progress.

Amount: Several awards of various amounts up to a maximum of $1,500

Guelph Student Assistance ACCESS Bursaries [I3556]

These bursaries have been established and approved by undergraduate students through student referendums with the aid of the Ontario government's OTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: Several awards of varying amounts up to $1,000

Guelph Student Assistance Program [I3056]

These bursaries have been established and approved by undergraduate students through student referendums to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): Undergraduate Students

Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need.

Amount: Several awards of varying amounts up to $1,000

Gwen Karr Memorial Bursary [I3010]

Mr. T.K.C. Karr, O.A.C. '32, has provided an endowment fund to assist students in a degree or diploma program of the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): Mr. T.K.C. Karr, O.A.C. '32

Qualification(s): O.A.C. students with demonstrated financial need.

Amount: Several awards of various amounts
**Helen Mahon Memorial Bursary [I3063]**

Established in memory of Helen Mahon, a longtime employee of the University of Guelph and who, following the death of her husband, raised three young children alone, all of whom graduated from university. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a statement that indicates you meet the criteria of this bursary. Awarded in the winter.

**Donor(s):** Family and Friends of Helen Mahon  
**Qualification(s):** Students registered in any program who come from a family where one parent is deceased.  
**Amount:** 1 award of $500

---

**Howard and Myrtle Rogers Bursaries [I3537]**

Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** The Estate of Howard and Myrtle Rogers with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate on-going financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 10 up to $2,000

---

**Indigenous Student Bursary [I3068]**

In 2009, the Ministry of Advanced Education and Skills Development established the this Bursary as part of their new Aboriginal post-secondary education funding initiative. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with their financial education. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and complete the Indigenous Student Bursary application. Selection is based on financial need.

**Donor(s):** Ministry of Advanced Education and Skills Development (MAESD)  
**Qualification(s):** Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP) and have demonstrated financial need.  
**Amount:** several awards ranging in values from $1,000 to $3,500

---

**International Emergency Medical Aid Assistance [I3059]**

The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial hardships due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an on-going basis.

**Donor(s):** University of Guelph  
**Qualification(s):** International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.  
**Amount:** Several awards of varying amounts

---

**Ivey Cook Bursaries [I3076]**

Apply to SAS using the “New Student Intake Form” and a letter explaining your situation and attach documentation showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first come first served basis, based on the validity and need for an assessment.

**Donor(s):** Suzanne Ivey Cook  
**Qualification(s):** Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment.  
**Amount:** several awards of up to $1,000

---

**Joyce Barclay-Ogden Bursary [I3074]**

Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Joyce Ogden  
**Qualification(s):** Students registered in any program in the College of Social and Applied Human Sciences with demonstrated financial need.  
**Amount:** 1 award of $1,000

---

**L. George and Margaret Baker Bursary [I3052]**

Robert Jack and M. Ismay Martin provide this bursary in memory of Ismay's parents, George and Margaret Baker in recognition of the contributions to society. This award is not tenable with other Senate Awards. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. To be considered for this award, you must list it on your N.A.F. and include a statement indicating your interest in functional foods and/or the rural community in which you belong to.

**Donor(s):** Robert Jack and M. Ismay Martin  
**Qualification(s):** Students who resided in Canada prior to their initial registration at the University of Guelph and who are in semesters 3 or 4 of the Food Science program are eligible. The award will be given to the student with an interest in functional foods and secondarily, to those who come from a rural community with greatest financial need.  
**Amount:** Several awards of varying amounts

---

**Lady Glencora Bursaries [I2586]**

Established by the Rathlyn Foundation, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** The Rathlyn Foundation with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students registered in the D.V.M. program and students in the honours B.Sc. (Bio-Med) program who have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** Several awards up to $5,000

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
<table>
<thead>
<tr>
<th>Award Name</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masterfeeds Bursaries [I3514]</td>
<td>Established by Masterfeeds and the O.A.C. Alumni Foundation, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Masterfeeds with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>O.A.C. students in B.Sc.(Agr) Animal Science or B.Sc. Animal Biology majors who have demonstrated financial need and, at the time of application, have a cumulative average of 60%. Students may receive one or two bursaries annually. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
<td></td>
</tr>
<tr>
<td>O.A.C. ‘55 Access Bursaries [I3517]</td>
<td>Provided by the class of O.A.C. ’55 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>O.A.C. Class of ’55 with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students at any semester level in an O.A.C. degree program or students enrolled in the B.ENG program with demonstrated financial need and a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
<td></td>
</tr>
<tr>
<td>O.A.C. ’57 Bursaries [I3518]</td>
<td>Provided by the Class of O.A.C. ’57 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>O.A.C. ’57 and the O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>O.A.C. undergraduate degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
<td></td>
</tr>
<tr>
<td>O.A.C. ’38 Lloyd Minshull Bursaries [I3529]</td>
<td>Established by O.A.C. ’38 Alumni, with the assistance of the Ontario government’s OSOTF program, to recognize the many contributions of Lloyd Minshull to his classmates and to O.A.C. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>O.A.C. ’38 Alumni with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
<td></td>
</tr>
<tr>
<td>Norma Valeriote International Student Bursaries [I3009]</td>
<td>Preference given to a student from a country of focus as defined by CIDA (Canadian International Development Agency). Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Mrs. Norma L. Valeriote</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several of varying amounts</td>
<td></td>
</tr>
<tr>
<td>Marie Hardacre Bursary [I3548]</td>
<td>Established by Mrs. A. Marie Hardacre, MAC DHE 1930 for students in CSAHS with a preference to female students registered in the Department of Family Relations and Applied Nutrition. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Mrs. A. Marie Hardacre with matching funding through the Ontario Trust for Student Support program</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students registered in any academic program in the College of Social and Applied Human Sciences with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $5,000</td>
<td></td>
</tr>
<tr>
<td>Madison Gough Memorial Bursary [I3103]</td>
<td>Established by the friends and family of Madison Gough, a gentle, kind spirit who was inspired by nature, animals, or music and passionate about acceptance of difference. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Bob Gough and Laura Ladouceur</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students registered in any program who have demonstrated financial need.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $1,000</td>
<td></td>
</tr>
<tr>
<td>O.A.C. ‘38 Lloyd Minshull Bursaries [I3529]</td>
<td>Established by O.A.C. ’38 Alumni, with the assistance of the Ontario government’s OSOTF program, to recognize the many contributions of Lloyd Minshull to his classmates and to O.A.C. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>O.A.C. ’38 Alumni with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students at any semester level in an O.A.C. degree program or students enrolled in the B.ENG program with demonstrated financial need and a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several of varying amounts</td>
<td></td>
</tr>
<tr>
<td>Murray P. And Florence L. Hannah Bursaries [I3571]</td>
<td>Preference will be given to students from the County of Northumberland. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Estate of Florence Hannah with matching funding through the Ontario Trust for Student Support program</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>OAC students registered in the BSc(Agr) or the BSc(Env) program who have completed a minimum of 4.0 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $1,000</td>
<td></td>
</tr>
<tr>
<td>O.A.C. ‘57 Bursaries [I3518]</td>
<td>Provided by the Class of O.A.C. ’57 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>O.A.C. ’57 and the O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>O.A.C. undergraduate degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
<td></td>
</tr>
<tr>
<td>Méét Nation of Ontario Bursary [I3092]</td>
<td>The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and a statement confirming Métis status and include your card number.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Métis Nation of Ontario</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $1,000</td>
<td></td>
</tr>
<tr>
<td>Leroux Bursaries [I3535]</td>
<td>Established by Mr. Hector Leroux, O.A.C.’44, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
<td></td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Mr. J.H. Leroux with matching funding through the Ontario Student Opportunities Trust Fund</td>
<td></td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>O.A.C. degree students in the B.Sc.(Agr.), B.Sc., B.Comm. or B.Sc.Env. programs with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
<td></td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
<td></td>
</tr>
</tbody>
</table>
O.A.C. Alumni Foundation Access Bursaries [I3533]
Provided by the O.A.C. Alumni Foundation, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD
Donor(s): O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

Robert Auger Humanitarian Bursary [I3058]
Established in memory of Bob Auger, a former Associate Registrar at the University of Guelph. It is intended as an emergency fund to assist students who unexpectedly find themselves in difficult financial situation who could benefit from receiving a grocery voucher. To be considered, students must have completed a Financial Aid Assessment form and arrange an appointment with a Financial Aid Counsellor. Awards can be made by calling 519-824-4120 extension 58715.
Donor(s): Family and friends of Robert Auger
Qualification(s): Students registered in any degree program with an unexpected financial emergency.
Amount: Several grocery vouchers or book vouchers

OAC Student Aid Bursary [I3590]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.
Donor(s): Anonymous with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any OAC Undergraduate Degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: several awards of varying amounts totalling $8,000

Ron Scriver Memorial Bursary [I3547]
Established in memory of Mr. Ron Scriver (1946 - 2005) C.E.P.S B.A. ’76, to honour his outstanding 32-year career with the Ontario Universities’ Application Centre and his extensive involvement with colleagues throughout the University system. Preference will be given to students registered in the Bachelor of Computing Science Program. Apply with a Financial Need Assessment Form to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.
Donor(s): Family and Friends of Ron Scriver with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any program offered by C.E.P.S with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 1 award of $2,000

Scotiabank Bursaries [I3532]
Established by Scotiabank, with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.
Donor(s): Scotiabank with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 2 awards of $1,500

Shirley Endean Bursaries [I3570]
These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.
Donor(s): Estate of Shirley E. Endean & multiple donors with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: Several awards of varying amounts

Student Financial Services Bursary [I3107]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.
Donor(s): University of Guelph
Qualification(s): Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.
Amount: Several awards up to a maximum of $6,000

Ontario Co-operatives R.P. Forshaw Bursary [I3013]
The Co-operatives, Credit Unions, friends and associates of Prof. R. P. Forshaw have established this bursary. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7 and a letter indicating membership of co-op or credit unions.
Donor(s): The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw
Qualification(s): Undergraduate students who have financial need. Preference may be given to candidates who have been or are members of a co-operative or credit union.
Amount: 1 award of $400

Ontario Co-operative Organizations Bursaries [I3166]
These bursaries were created from gifts from multiple donors, with a leading legacy gift from the Ontario Co-operative Organizations. Apply to Student Financial Services with a completed Financial Need Assessment Form and arrange an appointment with a Financial Aid Counsellor. Appointments can be made by calling 519-824-4120 extension 58715.
Donor(s): The Ontario Co-operative Organizations
Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts totalling $8,000

Ontario Federation of Agriculture Bursaries [I3520]
Provided by the Ontario Federation of Agriculture and the O.A.C. Alumni Foundation with the assistance of the Ontario government's OSOTF program. Apply with a letter indicating 4H and/or rural community involvement and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. To be considered for this award you must indicate it on our N.A.F. and include a statement outlining your extracurricular activities. ACCESS AWARD
Donor(s): Ontario Federation of Agriculture with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. students with demonstrated financial need enrolled in the B.Sc.(Agr.), B.Comm., B.Sc. or B.Sc.(Env.) programs. Preference will be given to students from farm families who have participated in 4H and/or rural community activities. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

Ontario First Generation Bursary [I3062]
The Ministry of Advanced Education & Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.
Donor(s): Ministry of Advanced Education & Skills Development (MAESD)
Qualification(s): Students registered in any program who are first generation students. Ontario residents (as defined by OSAP) and who have demonstrated financial need.
Amount: several awards ranging in values from $1,000 to $3,500

Ontario Grape Growers Bursary [I3033]
Offered by the Ontario Grape Growers Action Committee. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.
Donor(s): The Ontario Grape Growers Action Committee
Qualification(s): Students who are good academic standing in semesters 3 to 6 of a degree program or semesters 3 to 4 of a diploma program administered by O.A.C., and demonstrated need of financial assistance.
Amount: Several of various amounts

Ontario Student Opportunities Trust Fund Bursary [I3107]
The Ontario Student Opportunities Trust Fund (OSO) provides a bursary to students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Donor(s): Government of Ontario
Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: Several awards of varying amounts
T.K. Warley Bursaries [I3510]
Established by O.A.C. Alumni Association, with the assistance of the Ontario government's OSOTF program, to recognize Professor T.K. Warley's significant contribution to the O.A.C. Foundation and to students through teaching and promotion/development of "Experience Agriculture". A degree student may receive this bursary twice. Apply by letter outlining extracurricular involvement and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): O.A.C. Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students with demonstrated financial need who are in semester 5 to 8 of any degree program within O.A.C. A minimum 65% is required, as is participation in student activities, governance, and/or college affairs. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

Tony and Nan Legris Bursary [I3072]
Established by Rosemary Legris in memory of her parents, Tony and Nan Legris, Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Rosemary Legris

Qualification(s): Students registered in any program in the College of Social and Applied Human Sciences with demonstrated financial need.

Amount: 1 award of $1,200

Uffelmann Connor Family Bursary for Indigenous Students [I3109]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Métis or Inuit).

Donor(s): Maris Uffelmann and Dean Connor

Qualification(s): Students registered in any program who self-identify with First Nations (Status and non-Status), Métis or Inuit ancestry and who demonstrates financial need.

Amount: 1 award of $1,000

Uffelmann Connor Family First Generation Bursary [I3108]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as a first-generation student.

Donor(s): Maris Uffelmann and Dean Connor

Qualification(s): Students registered in any program who is a first-generation student (First generation students (parents did not attend post-secondary studies, full-time or part-time, in or outside Canada at any time or in any program) registered in any program with demonstrated financial need. and who demonstrates financial need.

Amount: 1 award of $1,000

University of Guelph Access Bursaries [I3522]
Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Alumni and Friend of the University of Guelph with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of $500, Several awards of $2,000

University of Guelph Alumni Association Access Bursaries [I3523]
Established by the University of Guelph Alumni Association, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): University of Guelph Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $1,250

University of Guelph International Bursary [I3048]
The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Students should apply to the International Student Advisor by Nov. 1 for the fall semester; March 1 for the winter semester, and July 2 for the summer semester with a completed International Student Financial Need Assessment Form (N.A.F.). If students have an emergency situation, please contact the International Student Advisor, in Student Life, University Centre, Level 3.

Donor(s): University of Guelph

Qualification(s): International students registered in a degree program who have completed a minimum of 4.0 credits and are registered in a minimum of 1.5 course credits.

Amount: Several varies

University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [I3047]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph

Qualification(s): Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

Amount: Several awards to a maximum of $2,000

University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph

Qualification(s): Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

Amount: Several awards up to a maximum of $6,000

University Student Assistance Program [I3057]
These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph

Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).

Amount: Several awards of various amounts to a maximum of $1,000

Velma Carter Davis Bursary [I2210]
This award was established in memory of Vera Carter Davis and inspired by her love for animals. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Lynn Bonany

Qualification(s): Phase 4 students enrolled the small animal stream of the DVM program who have participated in extracurricular or volunteer activities related to small animal care since admission to the DVM program with demonstrated financial need.

Amount: 1 award of $1,750
**Virginia Conner Memorial Bursary [I3110]**
Apply by October 7th to the Student Financial Services with a completed Financial Need Assessment form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Selection will be based on financial need.

*Donor(s):* Estate of Virginia Conner  
*Qualification(s):* Students registered in any program offered by OAC with demonstrated financial need.  
*Amount:* several awards of up to $2,000

**William Barlow Memorial Bursary [I3101]**
This bursary was created to recognize the farming contributions and community spirit of Mr. Barlow. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

*Donor(s):* Mr. William Barlow  
*Qualification(s):* Students registered in any program within the Ontario Agricultural College at the University of Guelph who is from Durham Region, Northumberland County, or County of Victoria including City of Kawartha Lakes and has demonstrated financial need.  
*Amount:* 1 award of $3,000

**F.E. Wolff International Scholarship [T0313]**
The late Frank E. Wolff was a faculty member and a graduate of O.A.C. He was active in the O.A.C. Alumni Foundation and in the establishment of the O.A.C. Alumni Foundation. This scholarship fund was established in memory of Frank E. Wolff, Mr. A.O. Wolff and family. As a faculty member, he studied the techniques of artificial insemination of cattle in Denmark and upon his return in 1939, employed these techniques in the O.A.C. herd. Apply to the OAC Awards Office by February 1 with a letter outlining the cost of your trip for this course. Please be sure to include your name, student ID number, your program of study and the award you’re applying to on your application. Please email your application to oacaward@uoguelph.ca and include the award name and ID number in the subject line.

*Donor(s):* Mr. A.O. Wolff (Sr.)  
*Qualification(s):* Students registered in any program offered by OAC with a minimum 70% cumulative average and who are registered AGR*2500 (Field course in International Agriculture with field trip to Costa Rica).  
*Amount:* several awards of varying amounts

**O.A.C. ’54 International Study Scholarship [T0586]**
Established in memory of Beth Duncan to support students participating in an exchange program, study abroad semester, or a field trip course. Submit a letter (of not more than two pages) outlining the intended international study program, reasons for choosing the program and the anticipated benefits of participation. Letters should also include a brief summary of extracurricular and student related activities. Letters of reference will be considered. Apply to the O.A.C. Awards Office by May 15, no more than two semesters prior to the commencement of the program.

*Donor(s):* Class of O.A.C. ’54  
*Qualification(s):* Currently registered students in O.A.C. who are Canadian citizens or permanent residents with a minimum 75% cumulative program average who intend to participate in an exchange program, semester abroad, or field trip course.  
*Amount:* 2 awards of $3,000
Bachelor of Science in Agriculture

Please refer to the General Statement on Awards for:

- Award Eligibility
- ACCESS Awards Eligibility
- Ontario Student Opportunity Trust Fund (OSOTF) Program
- How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

Entrance Scholarships

Amos & William Lowe Memorial Scholarship [E0158]
Endowed by the late William B. Lowe of Fort Francis, Ontario. Preference will be given first to eligible students from the district of Rainy River, then from the district of Kenora or Thunder Bay, and finally from the remaining districts of Northern Ontario. Application is not required.

Donor(s): William B. Lowe and Amos Edgar Lowe

Qualification(s): Student entering any of the undergraduate degree programs of the Ontario Agricultural College.

Amount: 1 award of $2,000

Angelo and Frank Agro Undergraduate Scholarship [E0520]
These scholarships are provided by the Agro Scholarship Fund. Apply, by April 15, to Student Financial Services (awards@uoguelph.ca), with a one to two-page, point-form listing of 4-H activities. This list should describe current or past activities within 4H and the position titles/names, if applicable. Attach a reference letter from a 4H club official. These scholarships will be awarded to the students demonstrating the most active involvement with 4H clubs. The committee will consider any appropriate elements, such as the length of membership in 4H, leadership role(s) in support of 4H, creativity in 4H outreach, and coordination with other rural and academic activities. Credit will be given to those who have achieved in county, provincial and national 4H competitions. Recipients must maintain full-time studies and at least a 70% program average each year for continuation of the award.

Donor(s): The Frank Agro Estate

Qualification(s): Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 - 4H projects.

Amount: 7 awards of $7,000 (payable over 4 years of study)

Atkinson Family Scholarship [E0972]
Established by the Atkinson Family in honour of Walter McFee and Johnny Atkinson for their passion for farming, family and community. Selection will be based on highest admission average. No application required.

Donor(s): Amy and Bryan Atkinson

Qualification(s): Students entering any degree program offered by the Ontario Agriculture College (OAC).

Amount: 1 award of $1,000

B.Sc.(Agr) Alfred McInroy "Mac" Cuddy Memorial Scholarship [E0669]
Established by the Estate of Alfred McInroy (Mac) Cuddy, BSA ‘42 and awarded to the two students who demonstrate high academic achievement and involvement in agriculture-related activities. Apply to Student Financial Services (awards@uoguelph.ca) by April 15 with a one page letter outlining career aspirations, extracurricular and community involvement in agriculture-related activities.

Donor(s): The Estate of Alfred McInroy Cuddy

Qualification(s): Students entering the first semester of the Bachelor of Science in Agriculture with a minimum of 80.0% admission average.

Amount: 2 awards of $2,000

Barry Lee Scholarship for Agricultural Excellence [E0797]
Established to recognize Barry Lee’s 19 years of service as a Counsellor and his strong support of rural and agricultural activities in the region. Preference will be given to students from the Regional Municipality of Halton. Selection will be based on highest admission average. No application is required.

Donor(s): Regional Municipality of Halton

Qualification(s): Students entering any undergraduate program offered by OAC.

Amount: 1 award of $1,000

Board of Governors’ Scholarships [E0317]
This scholarship is considered one of the University of Guelph’s most prestigious entrance scholarships with only 25 awards being awarded each year. Recipients of this scholarship are entering their program with one of the highest admission averages of that cohort. The scholarship will be renewed each year provided recipients remain registered in full-time studies and achieve a minimum 80.0% average in their previous academic year of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80.0% or better average in the previous academic year of full time study. Payments lost cannot be added to the end of the award period. This award cannot be held with the President’s, Lincoln Alexander Chancellor’s or Chancellors’ Scholarships. Application is not required.

Donor(s): Board of Governors

Qualification(s): Academically outstanding entering students with the highest admission averages of the entering cohort.

Amount: 25 awards of $20,000 (payable over 4 years of study)

Chancellor’s Scholarships [E0688]
This scholarship was established in 2009 in honour of current and past University of Guelph Chancellors and is considered one of the most prestigious entrance awards offered by the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the President’s Scholarships, the Lincoln Alexander Chancellor’s Scholarships, or the Board of Governors’ Scholarships.

Donor(s): University of Guelph

Qualification(s): Students entering a degree program with a minimum 90% admission average who have taken leadership roles in activities that demonstrate an interest in international relations and development, or leadership roles in activities relating to arts and culture and demonstrate the potential to become a leader in society.

Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

Dr. C. John Small Commonwealth Scholarship [I0611]
Established in honour of Dr. C. John Small, OAC BSA ‘42, Hon D. Law ’75, and his lifelong dedication to foreign service. Selection will be based on the assessment of: (a) a one-page submission describing the significance for the student visiting Guelph to the program of study at the partner exchange University, (b) two faculty references of no more than one-page each, and (c) consistent high performance in course work completed, as documented by a transcript of program grades to date. Apply to the Centre for International Programs by May 1 for visiting during the subsequent Fall or Winter semesters with the above mentioned documents.

Donor(s): Mrs. Jean K. Small

Qualification(s): Full-time visiting exchange students registered for at least one semester from a Commonwealth developing country who are pursuing studies or conducting research in the area of agriculture and rural development.

Amount: 1 award of $1,500

Dr. Jack Britney Scholarship [E0034]
Established in memory of Dr. Jack Britney, a graduate of ‘57A and O.A.C. ’60 and former faculty member in the former School of Food Agriculture and Resource Economics and Extension Education. Selection will be based on the students entering with the highest admission average. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a statement indicating the program and where the Diploma was taken and when.

Donor(s): Friends and Associates

Qualification(s): Students entering any OAC degree program with a preference given to students who graduated from any University of Guelph Associate Diploma program.

Amount: 1 award of $1,750

Ed Carter/University of Guelph Faculty Association Scholarship [E0292]
Award is payable at $750 per annum in the student's 1st, 3rd, and 5th semester levels, provided a cumulative average of at least a 70% is maintained. To receive the final payment, the recipient will normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.

Donor(s): University of Guelph Faculty Association

Qualification(s): Students entering any undergraduate degree program at the University of Guelph from Wellington county.

Amount: 1 award of $2,250 ($750 in the 1st, 3rd, and 5th semesters)
IX. Scholarships and Other Awards, Bachelor of Science in Agriculture

Ernie Kendall Science Entrance Scholarship [E0668]
Established by Ernest Kendall, O.A.C., B.S.A. 1932 and awarded to the student entering a science program with the highest admission average. Preference will be given to students that graduated from Elmira District School. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Board of Governors' Scholarships. Application is not required.

Donor(s): Ernest W. Kendall
Qualification(s): Students entering any sciences (B.Sc., B.Sc.(Agr.), B.Sc.(Env.), B.Sc.(Tech), B.A.Sc., B.A.S., B.B.R.M., B.Eng.) degree program with a minimum 80.0% admission average.
Amount: 1 award of $2,000

Gordon W. Innes Scholarship [E0140]
Application is not required.
Donor(s): Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.
Qualification(s): Student entering any degree program from Oxford County with the highest admission average.
Amount: 1 award of $1,000

Hardy International Student Scholarship [E0659]
Selection is based on the assessment of the student's admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.

Donor(s): Mrs. Marion Hardy
Qualification(s): Full-time international students (defined as paying the international student tuition and fees) entering any degree program.
Amount: 1 award of $2,000

International Student Entrance Scholarships [E0408]
In support of the University's strategic direction of internationalism, entrance scholarships are available each Fall semester to the top international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all relevant documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.

Donor(s): University of Guelph
Qualification(s): Students on a "student visa" entering an undergraduate degree program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.
Amount: Several awards ranging in value from $5,500 - $8,500

J.D. MacLachlan Bursary [E0170]
Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.

Donor(s): The J.D. MacLachlan Trust
Qualification(s): Students entering any degree program at the University of Guelph.
Amount: 1 award of $1,500

Jack and Lilian MacDonald Scholarship [E0379]
Family, friends, and colleagues of Lilian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

Donor(s): Family, friends, and colleagues of Lilian MacDonald and Dr. Jack MacDonald
Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).
Amount: 1 award of $900

James MacMillan Memorial Scholarship [E0494]
Established in memory of James MacMillan, his great uncle, by Austin Conway of Toronto. Selection will be based on highest cumulative average. Application is not required.

Donor(s): Austin Conway
Qualification(s): Students entering any program offered by OAC who graduated from the University of Guelph. Preference will be given to students from Eastern Ontario which includes the counties of Prescott and Russell, Stormont, Dundas and Glengarry, Lanark, Renfrew, Leeds and Grenville, Frontenac and Lennox and Addington; and the City of Ottawa and to students entering the Bachelor of Science in Agriculture or the Bachelor of Commerce in Food and Agricultural Business, or the Bachelor of Arts with a major in Food, Agricultural and Resource Economics (FARE).
Amount: 1 award of $2,500

Lincoln Alexander Chancellor's Scholarships [E0689]
Established in 2001 in honour of Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This award cannot be held with the President’s Scholarships, the Chancellors' Scholarships or the Board of Governors' Scholarships.

Donor(s): Many Donors
Qualification(s): Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.
Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

McArthur-Humphries Scholarship [E0183]
An equal number of awards are available to students from each county. In the case of insufficient eligible applicants from one county, the awards will be given to eligible applicants from the other county. These scholarships are awarded to students with the highest admission averages. Application is not required.

Donor(s): Wilhelmina McArthur-Humphries Trust Fund
Qualification(s): Students entering any degree program with a minimum 75% admission average from Lanark and Wellington Counties.
Amount: 8 awards of $1,000

OAC 1968 Scholarship [E1008]
The Class of OAC 1968 established this bursary to celebrate their 50th anniversary. In reflecting on many of their own experiences the class generously supports undergraduate students in any OAC program with demonstrated financial need. Selection will be based on greatest financial need. Students must maintain enrolment in an OAC academic program to maintain their award. Students do not need to continue to demonstrate financial need for all 4 years to continue to receive this award. Apply by April 15 with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) and a summary of agriculture related activities to Student Financial Services (awards@uoguelph.ca).

Donor(s): The Class of OAC 1968
Qualification(s): Students entering any OAC degree program who have demonstrated financial need. Preference will be given to students who participated in agriculture-related activities/organizations during their high school career such as Junior Farmers or 4-H.
Amount: 1 award of $10,000 (payable over 8 semesters

OAC 51 Leadership Scholarship [E0930]
Established by the class of OAC '51 to promote and encourage leadership in OAC. Apply to Student Financial Services (awards@uoguelph.ca) by April 15 with a letter, maximum two pages, outlining demonstrated leadership in High School or community extracurricular activities. Selection will be based on significant demonstrated leadership in high school or community involvement.

Donor(s): Class of OAC 1951
Qualification(s): Students entering the Bachelor of Science in Agriculture program.
Amount: 5 awards of $4,000

Last Revision: July 4, 2019
2019-2020 Undergraduate Calendar
<table>
<thead>
<tr>
<th>Scholarship Program</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAC Specialist High Skills Major Program Scholarships (SHSM) [E09832]</td>
<td>The scholarships will be awarded to the 3 students with the highest admission averages. No application is required. <strong>Donor(s):</strong> OAC Dean's Office Liaison Program  <strong>Qualification(s):</strong> Students entering any OAC undergraduate program with a minimum 75% admission average who are/were registered in the Specialist High Skills Major (SHSM).  <strong>Amount:</strong> 3 awards of $1,000</td>
</tr>
<tr>
<td>Project Hero Scholarship [E0979]</td>
<td>The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to <a href="mailto:awards@uoguelph.ca">awards@uoguelph.ca</a> indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent's full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply. <strong>Donor(s):</strong> University of Guelph  <strong>Qualification(s):</strong> Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.  <strong>Amount:</strong> Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses</td>
</tr>
<tr>
<td>President's Scholarship [E0238]</td>
<td>Established in 1987 in honour of their donors or distinguished members of the University and are considered one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the Chancellors' Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Board of Governors' Scholarships.  <strong>Donor(s):</strong> A number of President's Scholarships have been named in honour of the following people and/or donors:  Cecil H. Franklin and Ingrid Franklin - In honour of Cecil Franklin, former Chair of the Board of Governors and Honorary Fellow of the University, the University of Guelph has named one of these twelve prestigious entrance awards to recognize his financial contributions and volunteer support to the President's Entrance Scholarship program.  Charles S. Humphrey - In memory of Charles S. Humphrey, a former President of Hart Chemical Company Canada Ltd. and long-time friend, the University has named one of these twelve prestigious entrance awards to recognize his financial contribution through his estate to the President's Entrance Scholarship program.  Jack R. Longstaffe - The University of Guelph has named one of these twelve prestigious entrance awards in memory of Jack R. Longstaffe to recognize his financial contribution through his estate to the President's Entrance Scholarship program.  Burton C. Matthews - The University of Guelph has named one of these twelve prestigious entrance awards in honour of Burton C. Matthews to recognize his insight and leadership in establishing the President's Entrance Scholarship program.  Kathleen and Frederick Metcalf - Mr. and Mrs. F.T. Metcalf of Guelph have endowed this award. After a distinguished career in cable TV, broadcasting and publishing, the late Mc Metcalf retired as President of Maclean Hunter Ltd. and Chairman of the Board of Maclean Hunter Cable Ltd. He was Honorary Chairman of Maclean Hunter Cable Ltd. and a member of the University of Guelph Heritage Board (1996).  Rol-land Farms Limited - Two of the scholarships are endowed by the four shareholders of Rol-land Farms Limited of Blenheim, Ontario, Hank, Peter, Arthur and Eric Vander Pol and their families. The Vander Pol families are generous supporters of a number of University projects and programs.  Lillian Stewart Usher - The University of Guelph has named one of these twelve prestigious entrance awards in honour of Lillian Stewart Usher a friend of the University to recognize her financial contribution through her estate to the President's Entrance Scholarship program.  Qualification(s): Students entering a degree program with a minimum 90% admission average who are/were registered in the Specialist High Skills Major (SHSM).  <strong>Amount:</strong> 3 awards of $1,000</td>
</tr>
<tr>
<td>Quinn Memorial Scholarship [E0578]</td>
<td>Established in memory of Ronald J. Quinn (O.A.C. '35) to an entering O.A.C. international full-time or exchange student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application is not required.  <strong>Donor(s):</strong> Mrs. Helen Quinn (O.A.C. '35)  <strong>Qualification(s):</strong> Entering semester one of an O.A.C. program to an international full-time student or to an international exchange student with a preference to those students from developing nations.  <strong>Amount:</strong> 1 award of $2,000</td>
</tr>
<tr>
<td>Robert Thompson Scholarship [E0283]</td>
<td>Established in memory of the late Robert Thompson and awarded to a student with high academic standing. Application is not required.  <strong>Donor(s):</strong> The estate of Mrs. Sarah Jane Fiske  <strong>Qualification(s):</strong> Students entering the first semester of the B.Sc.(Agr.) program.  <strong>Amount:</strong> 1 award of $1,000</td>
</tr>
<tr>
<td>Ted Morwick Scholarship [E0796]</td>
<td>Established by Ted Morwick, honorary alumni. The student with the highest admission average will be selected. This award is conditional on maintaining a 80% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify. (i.e. The student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year). If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with the Chancellors', President's and Board of Governors’ Scholarships. No application is necessary.  <strong>Donor(s):</strong> Mr. Edward (Ted) Morwick  <strong>Qualification(s):</strong> Students entering any degree program in the College of Arts.  <strong>Amount:</strong> 4 award of $8,000 (payable over four years.)</td>
</tr>
<tr>
<td>University of Guelph Entrance Scholarships [E0291]</td>
<td>The value of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student's financial account in two equal payments in the fall and winter semesters. Application is not required.  <strong>Donor(s):</strong> University of Guelph  <strong>Qualification(s):</strong> Students entering their first year of post-secondary studies for the first time with a minimum 85.0% admission average.  <strong>Amount:</strong> Several awards of $2,000, Several awards of $3,000</td>
</tr>
</tbody>
</table>
W. Penri Morris Memorial Scholarship [E0430]
Established by the family in memory of Penri Morris, who was killed World War II action in 1944 at the age of 21. Penri grew up on the family fruit farm near Forest, Ontario. After graduating from high school, he joined the Royal Canadian Air Force and was attached to the Royal Air Force Bomber Command as a navigator at the time of his death. Awarded to the student with the highest cumulative academic performance above 75% in all courses of the last year in high school study (full-time or equivalent study). Application is not required.

Donor(s): Prof. Rosalina Morris
Qualification(s): Students entering first year of any undergraduate program from North Lambton Secondary School in Forest, Ontario, in their absence, from Lambton County, and their absence, from Ontario.
Amount: 1 award of $1,000

Walter and Halina Slabikowski Scholarship [E0766]
This scholarship was established in memory of Walter and Halina Slabikowski who sent their first generation Canadian born children to university to enrich their lives and provide them with greater opportunities. The award will be given to the student with the highest admission average. The residence deposit must be received by published deadline date. Submit by email to awards@uoguelph.ca your full name, student ID number and a statement attesting to your parents’ place of birth and non participation in post secondary education by April 15th.

Donor(s): Irene Thompson and Slabikowski Family
Qualification(s): Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary studies.
Amount: 1 award of $1,000

Waterloo-Wellington Science & Engineering Fair (WWSEF) Scholarship [E0619]
Established to recognize excellence of the project submissions and encourage students to pursue university studies at the University of Guelph.

Donor(s): University of Guelph
Qualification(s): Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.
Amount: various awards of $1,000

Entrance Scholarships with Financial Need

Bill Klopp Memorial Scholarship [E0150]
Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by April 15. Students should complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student). Application is not required.

Donor(s): Ross and Mary Lou Klopp
Qualification(s): Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.
Amount: 1 award of $500

Devine Family Scholarships [E4542]
Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of Governors member, with the assistance of the Ontario government’s OTSSF program. These scholarships will be given out once every four years, unless the incumbent fails to qualify. The scholarship is renewed in years two, three and four with continued demonstrated financial need and full-time registration; students are required to register for no less than 2.0 credits each semester. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the "Devine Family Scholarship Application". Deadline to submit the complete application (both parts, the E.N.A.F. and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellors' Scholarships or the Chancellors' Scholarships, but can be held with all other entrance awards. ACCESS AWARD.

Donor(s): Mr. Peter J. Devine with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students who are Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person entering any University of Guelph undergraduate degree program with a minimum 80% admission average. Preference will be given to students who are Black Canadians. Additionally, students must meet the government-mandated terms for receipt of an OTSSF award (see General Statements on Awards).
Amount: up to 2 awards of $50,000 each (payable over 4 years of study)

Harold A. Kopas Memorial Entrance Scholarship [E0152]
Students should complete the online Financial Need Assessment Form (N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student), by April 15. Subsequent payments are dependent on the student maintaining a 70% cumulative average, demonstrating continuing financial need and continuing in the B.Sc.(Agr) or D.V.M. program.

Donor(s): The Harold A. Kopas Charitable Foundation
Qualification(s): Students entering the B.Sc.(Agr) program with demonstrated financial need and a minimum average of 70% from Wellington County or Lambton County, and their absence, from Ontario.
Amount: 1 award of $7,500 ($2,100 in year 1 and $1,800 in years 2,3, & 4)

Interhall Council Entrance Scholarship [E0636]
Established by the Interhall Council, the residence student government that programs, advocates and represents residence students to administration and Student Housing Services (www.interhall.ca), to ensure that the residence experience remains accessible for students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15.

Donor(s): Interhall Council
Qualification(s): Students entering a full-time undergraduate degree program with a minimum 85.0% admission average, residing in residence during first year on the Guelph campus with demonstrated financial need and demonstrated strong leadership ability.
Amount: 5 awards of $1,000

Kenneth O. Hammill-Blount Canada Scholarship [E4356]
Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government’s OSOTF program. Selection will be based on greatest financial need from the President’s, Lincoln Alexander Chancellors' or Chancellors' Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President’s, Lincoln Alexander Chancellors' or Chancellors' Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. ACCESS AWARD.

Donor(s): The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Entering students who have applied for the President’s, Lincoln Alexander Chancellors' or Chancellors' Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 1 award of $9,600 (payable in 8 payments of $1,200)
L. Norman Gibbins Microbiology Scholarship [E4392]

Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government’s OTSS program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): Family, friends and colleagues of Norman Gibbins with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering the Microbiology major in the B.Sc. program with a minimum 80% admission average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $2,500

OAC 1966 Entrance Scholarship [E0903]

In recognition of the contribution made to our lives by the Ontario Agricultural College, the graduates of 1966 O.A.C have established this scholarship to assist a well-qualified student to come to Guelph and become an “Aggie”. Students must complete the online Entrance Financial Need Assessment form as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted) or by April 15.

Donor(s): Class of OAC 1966

Qualification(s): Students entering any degree program offered by O.A.C with demonstrated financial need and are Ontario residents.

Amount: 2 awards of $5,000

P.A.J. Clarke Family Scholarship [E3081]

Paul and Aileen Clarke and their family established the endowment for this entrance scholarship in honour of Paul's father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining extracurricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not a requirement. This award is not tenable with the President’s Scholarships or Lincoln Alexander Chancellor's Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

Donor(s): Paul and Aileen Clarke

Qualification(s): Students with a minimum 80% average with a record of leadership and community participation. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm.

Amount: 1 award of $12,000 (payable over 4 years)

Robert C. Skipper Scholarship [E0485]

Established by Robert C. Skipper, Diploma in Agriculture 1948 and B.S.A. 1951, Selection will be based on academic standing, participation in extra-curricular activities and involvement in primary production and/or rural community activities. Financial need may also be considered. Apply to Student Financial Services (awards@uoguelph.ca) by April 15 with a one-page summary outlining activities and by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).

Donor(s): Mr. Robert C. Skipper

Qualification(s): Students entering a degree program in O.A.C that have graduated with a Diploma in Agriculture or Horticulture from the University of Guelph’s Ridgeway campus.

Amount: 1 award of $750

Rol-Land Farms Scholarships [E4519]

Established by Rol-Land Farms, with the assistance of the Ontario government’s OSOTF program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): Rol-Land Farms with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students entering a degree program with demonstrated financial need and a minimum 80% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 13 awards of $2,000

Entrance Bursaries

Dorothy Wright Entrance Bursary [E3075]

Established in memory of Miss Dorothy Wright, sister, and Miss Dorothy Wright, aunt, of Mr. Ivor Wright, OAC 65A this bursary supports students entering any undergraduate degree program offered by the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15.

Donor(s): Mr. R. Ivor Wright

Qualification(s): Students entering any OAC degree program who have demonstrated financial need.

Amount: 1 award of $1,000

Elizabeth Maud Hunter (Shier) Bursary [E3575]

This award was created to assist first year students in obtaining a post secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing a similar situation. Preference given to a student from the County of Brock. Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F.) for Entrance Awards. ACCESS AWARD

Donor(s): The Estate of the Late William Henry “Harry” Hunter with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering any degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 3 awards of up to $4,500

First Year Student Residence Bursary [E3066]

These 5 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the on-line Financial Need Assessment Form for Entrance Awards by April 15.

Donor(s): Student Housing Services

Qualification(s): Students entering any degree program with demonstrated financial need.

Amount: 5 awards of $500

Fred Hindle Bursary [E3500]

Awarded in memory of Fred Hindle, O.A.C.’38, a long-time generous supporter of his Alma Mater, who at the time of his death, wanted future students to have the same opportunity for an education as he had received. This bursary is awarded with the assistance of the Ontario government’s OSOTF program. This bursary is dependent on continued demonstration of financial need and successful completion of study to advance into the next year. Students should complete the online Financial Need Assessment Form (N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD.

Donor(s): W. Roy Hindle and family with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Entering O.A.C. degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).

Amount: 1 award of $6,000 (payable over 4 years)

Gord Bennett Memorial and Class of O.A.C. 43 Bursary [E3515]

The family and friends of R. Gordon Bennett, O.A.C. ’43, a former Deputy Minister of Agriculture, with the assistance of the Ontario government’s OSOTF program, have created this bursary. Apply by April 15 with a letter indicating farming background to Student Financial Services and by completing the online Financial Need Assessment Form (N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student). ACCESS AWARD

Donor(s): The family and friends of R. Gordon Bennett, O.A.C. ’43 with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students entering the BSc(Agr) or BComm (Food and Agricultural Business) programs with demonstrated financial need. Preference will be given to students whose primary family occupation is farming. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $1,000
IX. Scholarships and Other Awards, Bachelor of Science in Agriculture

**Harvey Graham Bursary [E3030]**
Provided by Harvey Graham (O.A.C. '39). Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a working farm and complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

Donor(s): Harvey Graham, O.A.C. ’39
Qualification(s): Students entering any degree program who come from a working farm and who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.
Amount: 1 award of $1,500

**International Student Entrance Bursaries [E3043]**
In support of the University’s strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students entering an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar’s Entrance Award Application to Student Financial Services.

Donor(s): University of Guelph
Qualification(s): Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.
Amount: Several awards ranging in value from $1,000 to $3,000

**John A. Carther Bursary [E3086]**
The late John A. Carther of Cornwall Ontario has created the John A. Carther Bursary to support students from Eastern Ontario. Preference will be given to students from the counties of Stormont, Dundas and Glengarry. Apply to Student Financial Services by April 15th by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).

Donor(s): The estate of John A. Carther
Qualification(s): Students entering any program offered by the Ontario Agricultural College with demonstrated financial need.
Amount: 1 award of $2,000

**McCacken Family Bursaries [E3580]**
Ron and Doreen McCracken from Scotland Ontario have created these bursaries in memory of his mother and father who farmed near Cobourg Ontario. These bursaries will provide opportunities for students to study agriculture and food at the OAC. Preference will be given to students who have graduated from high school with a Specialist High Skills Majors Program (SHSM). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15.

Donor(s): Ron and Doreen McCracken with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students entering an undergraduate degree program offered by OAC with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 5 awards of $3,000

**Real Ontario Farm Insurance Bursary [E3104]**
Apply to Student Financial Services by April 15th by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Selection will be based on financial need.

Donor(s): Trillium Mutual Insurance Company
Qualification(s): Students entering the Bachelor of Science in Agriculture program in OAC or the Bachelor of Commerce program with a major in Food and Agricultural Business with demonstrated financial need.
Amount: 1 award of $2,000

**Registrar’s Entrance Bursaries [E3034]**
Established by the University of Guelph to support entering undergraduate students with identified financial need. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offer will be a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

Donor(s): University of Guelph
Qualification(s): Students entering any degree program with a minimum registration of 1.5 credits and demonstrated financial need.
Amount: 500 awards of $4,000

**Robert Arthur Stewart Bursaries [E3272]**
Established in memory of Mrs. Elsa H. Stewart of Pakenham, Ontario. Mr. Stewart graduated from the Ontario Agricultural College in 1933 and Mrs. Stewart from Macdonald Institute in 1932. Applicants for these bursaries should have a good academic record and an active interest in community affairs. A letter from the student and a recommendation from the County agricultural representative or the secondary school principal should be sent to Student Financial Services by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

Donor(s): The Estate of Mrs. H. Stewart
Qualification(s): Students from the Ontario Counties of Lanark and Renfrew, and the Regional Municipality of Ottawa-Carleton, entering the first semester of a degree program at the University of Guelph.
Amount: 14 awards of $1,000

**Steven Jones Memorial Bursaries [E3077]**
Established by Mr. and Mrs. Jones in memory of their late son, Steven Jones (B.Comm. ‘97). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15. Selection will be made on demonstrated financial need.

Donor(s): Mr. Harry Jones
Qualification(s): Students entering any degree program with demonstrated financial need.
Amount: several awards of $2,000

**University of Guelph Accessibility Bursaries [E3038]**
Established by the University of Guelph to support students with substantial demonstrated financial need. In addition, students will be automatically approved for to participate in the work-study program conditional on the student securing a work-study approved position on campus. Participating in the work-study program is not required to hold this bursary. Payments of this award and the eligibility to participate in the work-study program are conditional upon the recipient receiving funding through their provincial/territorial and/or federal student loan assistance program and registration in a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offer will be a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.

Donor(s): University of Guelph
Qualification(s): Students entering any degree program with demonstrated financial need and a minimum registration of 1.5 credits.
Amount: 200 awards of $14,000 (payable over 4 years) plus Work-study approval

**In-course Scholarships**

**Aboriginal Student Engagement Scholarship [10922]**
Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA’s commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status), Métis or Inuit and outline volunteer/leadership experience within the Aboriginal community. The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but not be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

Donor(s): Aboriginal Student Association
Qualification(s): Students registered in any program who self-identify as First Nation (status and non-status), Métis or Inuit, who are engaged in the Aboriginal community either in their home community or at the University of Guelph.
Amount: 1 award of $1,000
Alumni House Call Centre Scholarship [I1020]

Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15th with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

Donor(s): Former Employees of the Alumni House Call Centre
Qualification(s): Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.

Amount: 1 award of $1,000

Amber Underwood Memorial Communications Scholarship [I0207]

Offered in memory of Amber (Gibbons) Underwood (O.A.C. ’79, M.Sc. ’87). Selection will be based on the highest grade received in one of the courses in agricultural communications. If there is a tie, the student with the highest GPA/cumulative average will be selected. Application is not required.

Donor(s): The Gibbons and Underwood families and the Class of O.A.C. ’79
Qualification(s): Students registered in the BSc (Agr.) program of the Ontario Agricultural College who have taken at least one of the following communications courses: EDRD*3050 Agricultural Communication I; EDRD*3140 Organizational Communication; EDRD*3160 International Communication; EDRD*4060 Agricultural Communication II in the previous fall, winter, or summer semester.

Amount: 1 award of $400

Barry and Cheryle Hill Scholarship [I0958]

Barry and Cheryle Hill from Ohsweken ON provides this scholarship of $2000 to a student registered in the B.Sc. (Agr.) program who have a minimum of 12.0 credits. Through creation of the scholarship the Hills, long-time members of Ontario Soil and Crop Improvement Association, Barry was president in 2010, acknowledge the important work and impact of the association on today’s Agriculture sector. Apply by May 15 with a letter (no more than 2 pages) stating their agricultural career aspirations to the OAC Awards Committee (oacaward@uoguelph.ca). Selection will be based on highest cumulative average. Please include the name of the award and the award ID number in the subject line of your email and on your application.

Donor(s): Barry and Cheryle Hill
Qualification(s): Students registered in the B.Sc. (Agr.) program who have completed a minimum of 12.0 credits and have career aspirations in agriculture.

Amount: 1 award of $2,000

BASF Canada Scholarship in Crop Protection [I0754]

Selection will be based on past work experience in the area of crop protection or crop agronomics, future goals, and academic achievement. Apply by letter (no more than 2 pages) outlining work experience in the area of crop protection or crop agronomics and future career goals to the OAC Awards office (oacaward@uoguelph.ca) by May 15th. Please include our name, student ID number and the name of the award on your application.

Donor(s): BASF Canada Inc. o/a BASF Canada
Qualification(s): OAC students registered in the B.Sc. (Agr) or B.Sc. programs who have completed a minimum 10.0 credits with a minimum 70% cumulative average.

Amount: 2 awards of $2,500

Beth Duncan Gold Medalist [C0205]

Offered by the O.A.C. Alumni Foundation to a student in the B.Sc.(Agr.) program. Application is not required.

Donor(s): O.A.C. Alumni Foundation
Qualification(s): Graduating B.Sc.(Agr.) student who has maintained minimum of a 70% standing in all semester levels while participating in and contributing to the extracurricular program on campus.

Amount: 1 award of a Medal

Bill Taylor Memorial Scholarship [I0280]

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.

Donor(s): AMF Canada Ltd.
Qualification(s): Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or collegiate athletics.

Amount: 1 award of $900

Blackburn Scholarship [I0404]

In commemoration of the 125th Anniversary of the Ontario Agricultural College, Dr. D.J. Blackburn, a retired faculty member of the former Rural Extension Studies program and former Director of the Associate Diploma Program has established this scholarship. Apply by letter, citing athletic contributions, to the O.A.C. Awards Committee (oacaward@uoguelph.ca) by May 15. Please include our name, student ID number and the name of the award on your application.

Donor(s): D.J. Blackburn
Qualification(s): O.A.C. degree or diploma student who has participated in intercollegiate athletics and maintained a minimum cumulative average of 70% while registered at Guelph. Athletic excellence and leadership will be used to determine the recipient. Students who have completed up to 3 years of study are eligible.

Amount: 1 award of $1,000

Braithwaite Business Scholarships [I0827]

Named in honour of Professor Bill Braithwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15 with a resume and 500-word statement describing why business courses, in addition to their major, will benefit their future career. Shortlisted applicants may be invited for an interview with the LANG Awards Committee. Selection is based on the student who best describes why taking business courses, in addition to their major, will benefit their future career. Students may hold this award only once.

Donor(s): Anonymous
Qualification(s): Students registered in any degree program, with the exception of B.Comm., who have successfully completed 1.0 credits towards the Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150 Introduction to Canadian Business or students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) who have completed 1.0 credits towards the minor.

Amount: 10 5000 (payable over 2 semesters)

Bridge Builder Scholarship [I1050]

The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Apply to Student Financial Services by May 15th with a one page letter outlining the volunteer activities that lead to social connections, breaking down barriers, and/or furthering intercultural and interfait heritage by supporting vulnerable or marginalized people through one or more of the following: Civic engagement by facilitating community engagement, social integration and volunteerism to promote inclusion for immigrant and ethno-cultural communities; Social connections by promoting social connections and employment networking, including programs that reduce barriers and increase support for vulnerable groups; Education and empowerment by promoting intercultural understanding and break down barriers to participation in community life and decision-making. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.

Donor(s): Muslim Society of Guelph
Qualification(s): Students registered in any program who, through volunteer activities in the local community, have demonstrated a passion and commitment for building bridges in one or more of the following ways: facilitating social connections; breaking down barriers; and/or furthering intercultural and interfait heritage by supporting vulnerable or marginalized people.

Amount: 1 award of $1,000

Bruce County Graduation Prize [C0037]

Offered by the Corporation of the County of Bruce. Application is not required.

Donor(s): The Corporation of the County of Bruce
Qualification(s): Student from Bruce County with the highest academic standing in the final full-time semester (4 course minimum), at the 8th semester level, in the B.Sc.(Agr.) program.

Amount: 1 award of $800

Bruce M. Cohoe Prize [C0069]

Selection will be based on demonstrated strong interest in agronomy with outstanding extracurricular activities at the departmental, College and University levels. Application is not required.

Donor(s): Mr. Bruce M. Cohoe
Qualification(s): Students graduating in June or who have graduated in the previous two convocations from the Crop, Horticulture and Turfgrass Sciences (CHAT) major of the B.Sc. (Agr.) program.

Amount: 1 award of $1,000
IX. Scholarships and Other Awards, Bachelor of Science in Agriculture

**Bruce W. Minshall Memorial Scholarship [I0450]**
Provided by Dr. W.H. Minshall (O.A.C. '33) in memory of his son Bruce, a graduate of O.A.C. in 1970. Apply by May 15 to the OAC Awards office (oacaward@uoguelph.ca) by letter listing courses taken in the area of crop protection. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** O.A.C. Alumni Foundation on behalf of Dr. W.H. Minshall

**Qualification(s):** O.A.C. students in the B.Sc.(Agr.), B.Sc.(Env.) or B.Sc. degree programs who have completed semester level 6 are eligible. Interest in crop protection and achievement in courses such as CROP*4240, ENVB*3030, ENVB*3210, ENVB*4100, and ENVB*4240 will be considered. Awarded to a student with an interest in crop protection and showing the greatest improvement in academic standing since entering the program.

**Amount:** 1 award of $1,000

---

**C.W. Riley Prize [C0246]**
The C.W. Riley Prize was established by a number of his friends and associates. Application is not required.

**Donor(s):** Friends and associates of C.W. Riley

**Qualification(s):** Student who, on graduation from Food Agriculture and Resource Economics, Agricultural Business or Resource Economics and Rural Development major, attains the highest proficiency in the area subjects.

**Amount:** 1 award of $250

---

**Canadian Agri-Marketing Association (Ontario) Scholarship [I0541]**
Selection will be based on a combination of academic achievement and greatest demonstrated interest in agri-marketing. Apply to the OAC Awards Office by May 15 with a summary of participation in the CAMA Student Chapter and/or involvement in agri-marketing initiatives as well as a letter of recommendation from a faculty member. This award may only be held once.

**Donor(s):** Canadian Agri-Marketing Association (Ontario)

**Qualification(s):** Students registered in any program offered by OAC who have completed a minimum of 10.0 credits with a minimum 70% cumulative average and are active members of the CAMA Student Chapter and/or involved in agri-marketing initiatives.

**Amount:** 1 award of $1,000

---

**CFRU Volunteer Scholarship [I0215]**
The award is presented to the student who has made the most significant contribution to the operation and goals of CFRU. Apply to Student Financial Services by May 15 with a letter describing the contributions made as a volunteer with CFRU and how those contributions have supported the operation and furthered the goals of CFRU.

**Donor(s):** CFRU Alumni

**Qualification(s):** Students registered in any program with a minimum cumulative average of 70% who have volunteered at CFRU for at least one year.

**Amount:** 1 award of $1,000

---

**Charles McGowan Memorial Prize [C0187]**
Established in memory of the late Lieutenant Charles McGowan. Application is not required.

**Donor(s):** Charles McGowan Memorial Fund

**Qualification(s):** Outstanding graduating student in an O.A.C. degree program.

**Amount:** 1 award of $200

---

**Cheryl Somerville Memorial Leadership Scholarship [I0647]**
Established by family and friends in memory of the late Cheryl Somerville, OAC '96, to recognize the outstanding and significant leadership contributions of students. Selection will be based on leadership contributions to the college and/or university during the first three semesters; community, 4H and Junior Farmer activities will also be considered. Application is by nomination. Nominations will be made by Student Federation of the O.A.C. and must include a brief resume of the nominee and a statement of his/her leadership contributions along with an outline of the impact of those contributions to student and community life. Nominations are due in the OAC Awards Office by December 1st.

**Donor(s):** Family and Friends of Cheryl Somerville

**Qualification(s):** Students registered in the B.Sc.(Agr.) or the B.Comm. Agricultural Business program who have completed 7.5 credits with a 70% minimum cumulative average.

**Amount:** 1 award of $1,000

---

**Christina Victoria Kenny Memorial Scholarship [I1018]**
The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.

**Donor(s):** Family and Friends of Vikki Kenny

**Qualification(s):** Students registered in any degree program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.

**Amount:** 1 award of $1,000

---

**Class of ’51 O.A.C. Leadership Prizes [C0063]**
Established by Year ’51 O.A.C., on the occasion of its 45th anniversary. Selection will be based on significant demonstrated leadership in College and/or University extracurricular activities. Apply to the OAC Awards office (oacaward@uoguelph.ca) by April 1 with a letter outlining your demonstrated leadership in College and/or University extracurricular activities. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** Year ’51 O.A.C.

**Qualification(s):** Students who have graduated or are graduating in the previous Fall or Winter semesters from any degree or associate diploma program in the OAC, Guelph campus.

**Amount:** 5 awards of $3,000

---

**Class of ’67 O.A.C. Centennial Scholarship [I0067]**
Established by the graduating class of 1933 in honour of the late Professor W.J. Squirell. Academic standing and involvement in extracurricular activities will be used to determine the recipients. Apply by April 1 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter outlining your involvement in extracurricular activities. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** Class of O.A.C. ’67

**Qualification(s):** Student majoring in an O.A.C. department who through activity in all branches of college life as well as scholastic achievement has made an outstanding contribution to the University.

**Amount:** 2 awards of $2,000

---

**Class of 1933 Prize [C0062]**
Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.

**Donor(s):** Class of 1933 Prize

**Qualification(s):** Graduating Class of 1933

**Amount:** 2 awards of $4,000

---

**Class of 1970 Scholarship [I0424]**
Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.

**Donor(s):** Class of 1970: 25th Reunion Gift

**Qualification(s):** Outstanding student in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Deans' Honours List.

**Amount:** 1 award of $1,400

---

**Clayton and Dorothy Switzer Scholarships [I0276]**
Apply by May 15 to the OAC Awards office (oacaward@uoguelph.ca) with a letter outlining participation in extracurricular activities in all branches of college life. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** Clayton and Dorothy Switzer

**Qualification(s):** Students registered in a degree program offered by O.A.C. with a minimum of 10.0 credits completed, at least a 70% cumulative average and has demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

**Amount:** 1 award of $200

---

**Class of 1970 Scholarship [I0424]**
Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.

**Donor(s):** Class of 1970: 25th Reunion Gift

**Qualification(s):** Outstanding student in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Deans' Honours List.

**Amount:** 1 award of $1,400

---

**Clayton and Dorothy Switzer Scholarships [I0276]**
Apply by May 15 to the OAC Awards office (oacaward@uoguelph.ca) with a letter outlining participation in extracurricular activities in all branches of college life. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

**Donor(s):** Clayton and Dorothy Switzer

**Qualification(s):** Students registered in a degree program offered by O.A.C. with a minimum of 10.0 credits completed, at least a 70% cumulative average and has demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

**Amount:** 1 award of $2,500
Collins Barrow Scholarship [I0040]
Offered by Collins Barrow, a national firm of Chartered Professional Accountants. Selection will be based on the student who has achieved the highest grade in the course ACCT*3330, Intermediate Financial Accounting, in the past academic year. In the event of a tie, the award will go to the student with the highest cumulative average. Application is not required.

Donor(s): Collins Barrow - Wellington Dufferin District
Qualification(s): Students who have successfully completed the course ACCT*3330, Intermediate Accounting.
Amount: 1 award of $1,000

Credit Valley Horticultural Society Scholarship [I0467]
Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter of no more than two pages outlining participation in extracurricular activities in the field of ornamental horticulture. Please include our name, student ID number and the name of the award on your application. Selection will be based on this participation with a preference given to students who are residents of Mississauga.

Donor(s): Credit Valley Horticultural Society
Qualification(s): O.A.C. student studying in horticulture who has completed 5.0 credits with a minimum 70% average.
Amount: 1 award of $1,000

Dairy Challenge Prize [I0811]
Supported by The Madsen Dairy Cattle Research Fund, the Dairy Challenge Prize will be awarded to students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge. No application is required.

Donor(s): Madsen Dairy Cattle Research Fund
Qualification(s): Students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge.
Amount: several awards up to $2000

David F. Boyes Apiculture Scholarship [I0031]
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application is not required.

Donor(s): The Apiculture Club
Qualification(s): Student registered in the Fall semester who achieves high academic standing in Introductory Apiculture (ENVB*2210) in the previous year, demonstrates an interest in apiculture and who has participated in extracurricular activities.
Amount: 1 award of $200

Dawn Morris Memorial Prize [C0361]
Offered in memory of Dawn Morris, who spent 35 years in farm show business and was former Manager of the Canadian International Farm Equipment Show in Toronto. Selection will be on the basis of highest cumulative average with preference given to students who demonstrate extracurricular activity or employment in the field of agricultural marketing. Apply by April 1 by submitting a letter and your resume to the OAC Awards Office (oacaward@uoguelph.ca) outlining your involvement in extracurricular activities. Please include the award name and award ID number in the subject line of your email and on your application. Students who are graduating in June, or who have graduated in the previous two convocations from the BComm program with a major in Food and Agricultural Business and have a minimum 75% cumulative average with demonstrated involvement in extracurricular activities.

Donor(s): The Family of Dawn Morris
Qualification(s): Students who are graduating in June, or who have graduated in the previous two convocations from the BComm program with a major in Food and Agricultural Business and have a minimum 75% cumulative average with demonstrated involvement in extracurricular activities.
Amount: 1 award of $1,000

Deans’ Scholarships [I0323]
This award was established by the Board of Governors’ in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.

Donor(s): Board of Governors
Qualification(s): Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.
Amount: 150 awards of $2,000

Donald I. Broadfoot Scholarship [I0994]
This scholarship was created in honour of Donald Broadfoot who graduated from OAC in 1950. He worked for Hy-Line Poultry (a division of Pioneer Corn Company) in the US and Canada from 1950-1974 where he conducted disease and genetic research, and during that time did a lot of work which led up to effective treatments for various diseases in poultry. Apply by May 15 to the OAC Awards Committee (oacaward@uoguelph.ca) with a letter (no more than 2 pages) outlining your interest in poultry science. Please include relevant work experience; relevant volunteer experience and/or relevant research projects that demonstrate this interest. Please include the name of the award and the award ID number in the subject line of your email as well as on your application. Please include your student number on your application. Selection will be based on the strongest demonstrated interest measured by: work experience; volunteer experience and/or projects. Students may only receive this award once.

Donor(s): Doug Broadfoot
Qualification(s): Students registered in any program in OAC who have completed a minimum of 10.0 credits at the time of application and who demonstrate an interest in poultry science.
Amount: 1 award of $500

Doug Wakely Memorial Scholarship [I0334]
Provided by the friends and business associates of the late Doug Wakely. Preference will be given to students from the counties/regions of Wellington, Huron, Bruce, Perth or Waterloo. Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter listing course(s) in livestock production or in grain crop production that you have completed and outlining participation in athletics at the University, intramural or community level as a player or in an organizing capacity. Please include our name, student ID number and the name of the award on your application. Awarded in the fall semester.

Donor(s): The Harriston Group of the Ontario Grain and Feed Dealers
Qualification(s): Students registered in the B.Sc.(Agr.) program who have completed course(s) in livestock production or in grain crop production and who have participated in athletics at the University, intramural or community level as a player or in an organizing capacity.
Amount: 1 award of $650

Douglas M. Robinson Memorial Scholarship for Excellence in Communications [I0409]
Established in memory of Douglas Robinson, OAC’53. Doug spent his career promoting and creating awareness of agriculture. This scholarship recognizes his leadership in agriculture communications and his service to both the University and agriculture communities. Apply with a resume to the OAC Awards Committee (oacaward@uoguelph.ca) by May 15. Selection will be based on demonstrated leadership promoting and creating awareness of agriculture through extracurricular activity including student competitions, university clubs, events and student government.

Donor(s): Mrs Marilyn Robinson Murray
Qualification(s): Students registered in any degree program offered by the Ontario Agriculture College with a minimum of 10.0 credits.
Amount: 1 award of $1,000

Dr. James (Jim) Atkinson Scholarship [I1025]
This award has been created through the generous contributions of many alumni and friends to recognize Dr. James (Jim) Atkinson’s influence at Guelph. As coach for over thirty years on both the men’s and women’s teams, as well as a respected faculty in the department of Animal and Poultry Science, Jim has had an impact on and off the field. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

Donor(s): Alumni and Friends of Dr. James (Jim) Atkinson
Qualification(s): One male rugby player and one female rugby player who is registered in any undergraduate program and who has achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student enrolled in the Ontario Agricultural College.
Amount: 2 awards of $1,000
IX. Scholarships and Other Awards, Bachelor of Science in Agriculture

Dr. R. J. Hilton Memorial Scholarship [I0678]
Established to honour the accomplishments of Dr. Hilton as the Chair, Horticulture Science, University of Guelph, first Director of the Arboretum and President/Chair of the Royal Botanical Gardens. Selection will be based on the highest cumulative average, demonstrated involvement in horticulture activities and involvement in academic clubs. Summer related work experience will also be considered. Preference will be given to students registered in B.Sc.(Agr.) CHATS and B.Sc. Plant Science. Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter outlining the plant agriculture course(s) and/or involvement in horticultural activities and summer related work experience or information about involvement in academic club activities. Please include our name, student ID number and the name of the award on your application.

Donor(s): Robert E. Hilton
Qualification(s): Students registered in any program offered by O.A.C. who have completed a minimum 8.0 credits with a minimum 70% cumulative average.
Amount: 1 award of $1,000

Dr. Ralph and Joanne Watt Scholarship [I1080]
Apply to the OAC Awards Committee (oacaward@uoguelph.ca) by May 15 with a resume and a letter (no more than two page) outlining your career interests and your employment and/or extracurricular activities that demonstrate your interest in becoming an equine veterinarian and your involvement in agricultural activities. Please include the Award Name and ID in the subject line of your email and on all pieces of your application. Please also include your student ID on your application.

Donor(s): Sandy Watt
Qualification(s): Students registered in the Bachelor of Science in Agriculture with a major in Animal Science, or Honours Agriculture; the Bachelor of Science with a major in Animal Biology; or the Bachelor of Bio-Resource Management with a major in Equine Management who have completed a minimum of 8.0 credits who aspire to become an equine veterinarian and who actively participate in agricultural activities.
Amount: 1 award of $1,000

Foodland Hydro Scholarship [I0290]
The Foodland Hydro Scholarship was established by the Foodland Hydro Committee. Preference may be given to a student from Bruce, Huron or Middlesex Counties. Apply to the OAC Awards Office by (oacaward@uoguelph.ca) by May 15th, with a letter of no more than 2 pages outlining interest in agricultural environmental issues as they are affected by the public interest process. Please include our name, student ID number and the name of the award on your application.

Donor(s): Foodland Hydro Committee
Qualification(s): Student who has completed semester 6 in the B.Sc.(Agr) program and who has an interest in agricultural environmental issues as they are affected by the public interest process.
Amount: 1 award of $500

Frank and Gertraude Hurnik Scholarship [I0455]
Provided by Dr. Frank Hurnik, Professor Emeritus, and faculty member in Animal Biosciences from 1971 to 1997. Dr. Hurnik initiated work in behavioral studies and animal welfare at Guelph, developed the first course in Animal Welfare, and was co-founder and editor of the Journal of Agricultural and Environmental Ethics. Apply by letter to the OAC Awards Office (oacaward@uoguelph.ca) by May 15 outlining details of the project or meeting. The award will be given to the student who has the best presentation, paper or project. Preference is given to Graduate students. Please include our name, student ID number and the name of the award on your application.

Donor(s): Dr. Frank Hurnik
Qualification(s): Students registered in the O.A.C. who are associated with the department of Animal & Poultry Science and who undertake a project or attend a conference/scientific meeting or publish a paper in animal welfare or agricultural ethics may apply. A minimum of an "A" standing for in the last two semesters is required.
Amount: 1 award of $1,000

Gary Putnam Memorial Prize [C0241]
Provided in memory of their son Gary by Mr. and Mrs. Ross Putnam. Apply to the OAC Awards Office (oacaward@uoguelph.ca) by April 1 with a letter demonstrating interests in pesticides, insect, and/or weed control. Please include our name, student ID number and the name of the award on your application.

Donor(s): Mr. and Mrs. Ross G. Putnam
Qualification(s): Graduating B.Sc.(Agr.) student with high standing in at least 3 courses in pesticides or alternative methods of insect, disease and weed control.
Amount: 1 award of $500

George A. Gray O.A.C. ’51 Varsity Scholarships [I0487]
Established in memory of George Gray, O.A.C. ’51, a Guelph football lineman and a great player of the game. Recipients will be selected based on demonstrated athletic and leadership qualities. Coaches will nominate students to the Athletics Awards Committee. Preference will be given to members of the varsity football team. Application is not required. Awarded in the fall semester.

Donor(s): Mrs. George A. Gray
Qualification(s): In-course student-athlete who is a current member of a varsity team and has achieved a minimum 70% average in the previous academic year.
Amount: 2 awards of $1,250

Glen (Andy) W. Anderson Scholarship [I0380]
Family and friends of Glenn (Andy) Anderson (O.A.C./’54 Crop Science) have created a scholarship to honour him at the time of his retirement after 41 years as a Professor in O.A.C. He had an interest in weed science throughout his career. Selection will be based on performance in courses in weed science, summer employment and/or work activity in the agricultural chemical industry and/or leadership activities in weed science and related areas. Preference will be given to a student who has resided in Ontario for at least 12 months prior to admission to the University of Guelph. Apply by May 15 to the OAC Dean’s Office (Awards) with a letter listing courses in weed science you have taken and outlining summer employment and/or work activity in the agricultural chemical industry and/or leadership activities in weed science and related areas.

Donor(s): Anderson Family
Qualification(s): Offered to O.A.C. diploma students with an interest in agronomy or crop science who enter the B.Sc.(Agr.) Degree program and who demonstrate a commitment to and an interest in weed science.
Amount: 1 award of $600

Glen Webb Education Scholarship/ GROWMARK Foundation OAC - Guelph Campus [I0897]
Apply by May 15 to the OAC Awards Office with a letter of no more than two pages outlining leadership and involvement in extracurricular activities, community service or agricultural employment, farming background and career aspirations. Preference will be given to students with an Ontario farm background and are interested in pursuing full-time employment in agriculture in the province of Ontario after graduation. Selection will be made on leadership and involvement in the field of agriculture through extracurricular activities, part-time work, and/or volunteer work are eligible.

Donor(s): GROWMARK, Inc.
Qualification(s): Students with a minimum cumulative average of 70% who have completed 10.0 credits of any OAC degree program.
Amount: 2 awards of $1,000

Governor General’s Medal [C0044]
Established by the Office of the Governor General of Canada. Application is not required.

Donor(s): The Chancellery
Qualification(s): Restricted to those undergraduate students in any degree program who are graduating in June, or who have graduated in the previous two convocations, with the highest cumulative average.
Amount: 2 awards of a Silver medal each

Harry Barrett Memorial Scholarship [I1046]
This award was established through a gift from the estate of Mr. Harry Barrett, a graduate of OAC from 1949. Selection will be based on the highest cumulative average. Apply by May 15th to Student Finance with a written explanation of the planned experiential learning opportunity. If there are no applications by May 15th, the scholarship will be given to the student with the highest grade in ZOO*4920 in the previous Fall offering.

Donor(s): The Estate of Harry Barrett
Qualification(s): Students registered in any program who will be participating in field work related to bird studies. Preference will be given to students interested in research and/or study under the Bird Studies Canada program at their headquarters in Port Rowan, Ontario.
Amount: 1 award of $1,500

Last Revision: July 4, 2019
2019-2020 Undergraduate Calendar
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Amount</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
<th>Selection Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Undergraduate Scholarship</td>
<td></td>
<td></td>
<td></td>
<td>Selection will be based on high academic achievement and volunteer service to the community service. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community.</td>
</tr>
<tr>
<td>John Burton Scholarship</td>
<td>1 award of $1,000</td>
<td>Students registered in any program offered by the OAC who have completed between 10.0 and 12.0 credits with a minimum 70% average</td>
<td>Dr. John Burton</td>
<td>Preference will be given to student who have demonstrated leadership ability within the student body. Apply by May 15 to the OAC Awards Office with a letter, of no more than two-pages, outlining involvement with and contributions to the horse industry, career aspirations, and extracurricular involvements. Awarded in the fall semester.</td>
</tr>
<tr>
<td>John Deere Foundation of Canada Scholarship</td>
<td>1 award of $2,000</td>
<td>Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.</td>
<td>The John Deere Foundation of Canada</td>
<td>Established through the generosity of The John Deere Foundation of Canada to recognize academic excellence. Application is not required.</td>
</tr>
<tr>
<td>Jim Stokman Memorial Scholarship</td>
<td>1 award of $900</td>
<td>Entering students from the Six Nations Polytechnic (SNP).</td>
<td>Mrs. Jim Stokman</td>
<td>Applicants must have completed 5.0 credits with at least 'B' average in one of the following programs: B.Sc.(Agr.), B.Comm., B.Sc. or B.Sc.(Env.), and must have demonstrated community/student involvement both during high school and the first two semesters of University. Application is not required. Selection will be based on high academic achievement and volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community.</td>
</tr>
<tr>
<td>Joerg and Franzis Leiss Horticultural Scholarship</td>
<td>1 award of $500</td>
<td>Students with a minimum cumulative average of 75% who have completed at least 10.0 credits and are currently registered in the Bachelor of Science in Agriculture with a major in Horticultural Science or Environmental Science.</td>
<td>Mr. Joerg Leiss, O.A.C. '63</td>
<td>Applicants must have completed 5.0 credits with at least 'B' average in one of the following programs: B.Sc.(Agr.), B.Comm., B.Sc. or B.Sc.(Env.), and must have demonstrated community/student involvement both during high school and the first two semesters of University. Application is not required. Selection will be based on high academic achievement and volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community.</td>
</tr>
<tr>
<td>John A. Archibald Memorial Scholarship</td>
<td>1 award of $2,500</td>
<td>Bachelor of Science in Agriculture with a major in Horticultural Science or Environmental Science.</td>
<td></td>
<td>Applicants must have completed 5.0 credits with at least 'B' average in one of the following programs: B.Sc.(Agr.), B.Comm., B.Sc. or B.Sc.(Env.), and must have demonstrated community/student involvement both during high school and the first two semesters of University. Application is not required. Selection will be based on high academic achievement and volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community.</td>
</tr>
<tr>
<td>John Eccles Scholarship</td>
<td>1 award of $1,000</td>
<td>Full-time student registered in semester 2, 3, 4, 5 or 6 and living in residence in the Winter semester who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in residence related activities. Residence Life Staff and paid members of Interhall Council and Hall Councils are not eligible.</td>
<td>Student Housing Services</td>
<td>Application is not required. Selection will be based on high academic achievement and volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community.</td>
</tr>
<tr>
<td>John Partanen Scholarship</td>
<td>1 award of $1,250</td>
<td>Studentsregistered in the B.Sc(Agr) program who have completed a minimum of 10.0 credits.</td>
<td>John Partanen Estate</td>
<td>Application is not required. Selection will be based on high academic achievement and volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community.</td>
</tr>
<tr>
<td>Joseph Arlen Memorial Prize in Horticulture</td>
<td>1 award of $500</td>
<td>Student graduating from the B.Sc.(Agr.) program with an interest in Horticultural Science with the highest cumulative average in all semesters.</td>
<td>Mrs. Judy Arlen</td>
<td>Application is not required. Selection will be based on high academic achievement and volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community.</td>
</tr>
<tr>
<td>Rae and Gordon Skinner Memorial Scholarship</td>
<td>1 award of $500</td>
<td>O.A.C. student graduating from the B.Sc.(Agr.), B.Sc., or B.Comm. programs who has made a significant contribution to developing an understanding of the profession of agrology among fellow students.</td>
<td>The estates of the late Mr. and Mrs. A.G. Skinner</td>
<td>Provided by the late Rae Stalker Skinner (Mac '30) and Gordon Skinner (O.A.C.'24), former Registrar of the Ontario Institute of Agrologists. Consideration will be given to participation in the Student Branch of the Ontario Institute of Agrologists. Apply to the O.A.C. Awards Office by April 1 with a letter demonstrating contributions to agrology.</td>
</tr>
<tr>
<td>Kenneth W. Hammond Scholarship</td>
<td>1 award of $1,000</td>
<td>Students who have completed the course Environmental Perspectives and Human Choices ENVS*2070.</td>
<td>Kenneth W. Hammond</td>
<td>Student with the highest grade in the course ENVS*2070 “Environmental Perspectives and Human Choices.” Application is not required. Selection will be based on high academic achievement and volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community. Apply to the OAC Awards Office by May 15th, with a letter of no more than 2 pages outlining volunteer service to the community.</td>
</tr>
</tbody>
</table>
**Kevin Durie Memorial Scholarship [I0653]**

Established in memory of Kevin Durie, BA ’93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.

**Donor(s):** Christine Blake-Durie  
**Qualification(s):** Students who are registered in any degree program on the University of Guelph campus, are a member of Residence Life staff and are academically eligible to continue as a Residence Assistant or as part of Residence Life staff.

**Amount:** 2 awards of $1,000

---

**Kip Hunter Prize [I0139]**

For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May 1

**Donor(s):** Faculty, students and staff of the Philosophy Department  
**Qualification(s):** Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.

**Amount:** 1 Book prize

---

**Lambda Foundation Scholarship in LBGT Studies [I0591]**

This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LBGT peoples. Preference will be given to an applicant who is involved in the LBGT community as demonstrated by a record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a given student only once. Projects must have been completed or research proposals accepted within the past calendar year. Apply to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referencing involvement in the LBGT community and/or faculty support.

**Donor(s):** Lambda Foundation and other donors  
**Qualification(s):** Students enrolled in a program with a thesis, a research essay, independent research project or course work programs pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.

**Amount:** 1 award of $1,000

---

**Leonard Conolly Exchange Student Scholarship [I0446]**

Established by students, faculty, staff and friends to honour Prof. Leonard Conolly, professor of drama, Chair of the Department of Drama, 1981-88, and Associate Vice-President Academic, 1988-1992. Apply to the Centre for International Programs by April 5, for visiting during the subsequent Fall or Winter semesters. Selection, by the Centre for International Programs, will be based on assessment of (a) a one-page submission describing the significance of the student visiting Guelph to the program of study at the partner exchange university (b) two faculty references of one-page each, and (c) consistent high performance in the course work completed, as documented by a transcript of program grades to date, submitted by the home university.

**Donor(s):** Students, staff, faculty and friends of Dr. Leonard Connolly  
**Qualification(s):** Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).

**Amount:** 1 award of $1,000

---

**Linda S. Allen Memorial Graduation Prize [C0914]**

This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medallion, on the occasion of its second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant circumstances during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).

**Donor(s):** Brian Allen, Family, Friends and Colleagues of Linda S. Allen  
**Qualification(s):** Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.

**Amount:** 1 award of $1,000

---

**Marion McKenzie Scholarships for Outstanding Achievement in History [I0470]**

These prizes have been established in memory of Marion McKenzie (1905-1994), a teacher who had a love of learning and a continuing curiosity about the world both past and present. These are awarded to the top student in each of the required core courses in the History program (HIST*1050, HIST*2450) in the previous academic year. Application is not required.

**Donor(s):** Dr. James Snell and Mrs. Leslie Snell  
**Qualification(s):** Students who have completed one of the following required core courses in History: HIST*1050 and HIST*2450. The recipient for HIST*1050 must have completed no more than 5.0 credits; the recipient for HIST*2450, no more than 10.0 credits and be in the specialization in History.

**Amount:** 2 awards of $1,000

---

**Nathan Max Goldman Choir Scholarships [I0774]**

Established in honour of Mr. Goldman, an OAC graduate (1945 and 1947) and former President of the Philharmonia Society at the University of Guelph. The scholarships will support two students who demonstrate outstanding leadership and vision in the Symphonic Choir and/or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high vocal achievement and choral leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required as a recommendation by Choir Director will be made to the SOFAM Awards Committee.

**Donor(s):** Mrs. Anne Goldman and the family of Nathan Max Goldman  
**Qualification(s):** Students registered in any degree program who are currently a member of the University of Guelph Symphonic Choir and/or the Chamber Choir and have been a member of the University of Guelph Choruses for at least two years.

**Amount:** 2 awards of $1,000

---

**Nick Westwood Memorial Scholarship in Spectroscopy [I0982]**

In recognition of Professor Nick Westwood’s enduring contributions to the field of Molecular Spectroscopy, and his devotion to academic development and achievement at all levels, his family, friends and Department of Chemistry colleagues have established this award to honour his memory. Selection will be based on the highest grade in CHEM*2070 Structure and Spectroscopy. In the event of a tie, the award will go to the student with the highest cumulative average. Application not required.

**Donor(s):** Staff, faculty and friends of the Department of Chemistry  
**Qualification(s):** Students registered in any degree program with a minimum 80% cumulative average who have obtained a minimum of 80% in CHEM*2070 Structure and Spectroscopy.

**Amount:** 1 award of $1,000
IX. Scholarships and Other Awards, Bachelor of Science in Agriculture

Norman McCollum Dairy Scholarship [I0815]

Norman McCollum, Diploma Agriculture ’66, past president of OACAA and retired employee of the Guelph Turfgrass Institute has created this $1,500 scholarship through the OAC Alumni Foundation in recognition of his valued friendship with Glenhome Jersey Farm. Selection will be based on highest cumulative average. Apply to the OAC Awards Office by May 15, with a letter stating intent to return to the family dairy farm or pursue a career in the dairy industry.

Donor(s): Norman McCollum c/o The OAC Alumni Foundation
Qualification(s): Students registered in the B.Sc. (Agri) program, the B.Sc. Animal Biology major, or the B.Comm. Food and Agricultural Business major who have completed 10.0 credits and have declared an intent to return to the family dairy farm or pursue a career in the dairy industry.
Amount: 1 award of $2,000

O.A.C. ’55 Scholarships [I0064]

Provided by the class of O.A.C. ’55. Recipients will have made an outstanding contribution to College life through academic proficiency and participation in extracurricular activities and can be considered to have done the most for the College, for fellow students and in their personal development. Apply by May 15 to the OAC Dean’s Office (Awards) with a letter outlining your participation in Class/College/University activities. Awarded in the fall semester.

Donor(s): O.A.C. ’55
Qualification(s): Students registered in any O.A.C. degree program or students registered in the B.ENG. program that have completed a minimum of 10.0 with at least a 70% cumulative average.
Amount: 1 award of $1,500

O.A.C. Centennial Graduate Prizes [C0209]

The Ontario Agricultural College celebrated its 100th Anniversary in 1974. Many organizations and companies associated with the agricultural industry provided funds in conjunction with the Centennial activities. Funds have been established in perpetuity as a permanent commemoration of the Centennial of the College. Apply to OAC Awards Office by April 1 with a letter outlining extracurricular activities. Selection will be based on academic achievement in semesters 7 and 8, as well as participation in extracurricular activities throughout the student's university career.

Donor(s): Dean, O.A.C.
Qualification(s): Students graduating from a degree program administered by the Ontario Agricultural College and who plan to pursue graduate studies in any department or school of the Ontario Agricultural College in the year of baccalaureate graduation. The fellowship will be based on academic achievement in semesters 7 and 8, as well as participation in extracurricular activities throughout the student's university career.
Amount: 1 award of $2,200

O.A.C. Students’ Federation Medal [C0217]

Application is not required.

Donor(s): O.A.C.
Qualification(s): Graduating student in an undergraduate degree program in a major in an O.A.C. department who has been an outstanding leader in student activities at the College level throughout his or her University career.
Amount: 1 award of a Medal

OAC’45 Public Speaking Scholarship [I0200]

Offered by the Class of ’45 O.A.C., on the occasion of their 40th anniversary. Apply with a one page letter summarizing public speaking experience to the OAC Awards Office by May 15. Selection will be based on demonstrated excellence and effort in public speaking within or outside of the University of Guelph (i.e. TEDx, Toastmasters, 4-H, community events).

Donor(s): Mr. Aubrey Hagar
Qualification(s): Students who have completed a minimum of 15.0 credits in any program offered by OAC.
Amount: 1 award of $1,500

Ontario Agri Business Scholarship [I0101]

Apply to the OAC Awards Committee (oacaward@uoguelph.ca) by May 15 with a letter (no more than two page) outlining your participation in extracurricular activities. Please include the Award Name and ID in the subject line of your email and on your application. Please also include your student ID number on your application. Selection will be based on academic achievement (measured by your cumulative average) and participation in extracurricular activities during your Undergraduate Degree.

Donor(s): Ontario Agri Business Association
Qualification(s): Students who have completed between 10.0-15.0 credits in the B.Sc.(Agr.) program.
Amount: 1 award of $500

Ontario Fruit & Vegetable Convention Gary Ireland Memorial Scholarship [I0773]

Selection will be based on a demonstrated interest in horticulture/vegetable production and academic standing. Apply by May 15 to the OAC Awards Committee (oacaward@uoguelph.ca) by letter (no more than 2 pages) outlining the horticulture/vegetable production courses you have taken and include any work related experience. Please include the award name and ID number in the subject line of your email and on your application.

Donor(s): Ontario Fruit & Vegetable Convention
Qualification(s): Students registered in the Bachelor of Science in Agriculture with a major in: Crop, Horticulture and Turfgrass; or Organic Agriculture; or Honours Agriculture OR in the Bachelor of Science with a major in Plant Science who have completed a minimum of 8.0 credits with a minimum 70% cumulative average.
Amount: 1 award of $2,000

Ottawa Valley Agri Business Association Scholarship [I0858]

Apply to the OAC Awards Office (oacaward@uoguelph.ca) by May 15 with a two page letter outlining your participation in extra-curricular activities and your demonstrated academic achievement and your interest in animal science, crop production, soil science or agricultural economics. Please include the Award Name and ID in the subject line of your email and on your application. Please also include your student ID on your application. Selection will be based on outstanding academic merit and participation in extra-curricular activities.

Donor(s): Ottawa Valley Retail Feed & Seed Dealers Association
Qualification(s): OAC students who: 1. Are registered in the Bachelor of Science in Agriculture; 2. The Bachelor of Commerce with a major in Food and Agricultural Business; or the Bachelor of Science with a major in Animal Biology programs; 2. Have completed 4.0 to 15.0 credits and who have demonstrated involvement in extracurricular activities as well as academic interest and achievement in animal science, crop production, soil science or agricultural economics; 3. Are from Eastern Ontario (Ottawa-Carleton, Dundas-Glengarry-Stornont, Lanark, Prescott-Russell, Leeds & Glenvile, Lennox & Addington, Frontenac and Renfrew counties).
Amount: 1 award of $1,000

Ottawa-Carleton 1983 International Ploughing Match (O.A.C.) Scholarship [I0227]

Apply, by May 15, to the O.A.C. Awards Committee with a letter outlining extracurricular activities.

Donor(s): Ottawa-Carleton International Ploughing Match Committee 1983
Qualification(s): Students from the City of Ottawa who have completed between 5.0 and 9.75 credits in the in the B.Sc.(Agr.) program and who have a minimum cumulative average of 70%.
Amount: 1 award of $1,700

Parrish and Heimbecker Scholarship (formerly known as Heimbecker Scholarship in Entrepreneurship) [I0388]

Parrish and Heimbecker, Limited is a private, family owned business, founded in 1909 involved in many aspects of agri-business across Canada. This scholarship was established to encourage and support students’ level of involvement with the agricultural and food industry. Apply to the OAC Awards Committee at oacaward@uoguelph.ca with a resume demonstrating the students’ level of involvement with the agricultural and food industry. Selection will be based on demonstrated commitment to the agricultural and food industry measured by the approximate number of hours a student has dedicated per week to work and/ or extracurricular and/or volunteer activities related to the agricultural and food industry during their Undergraduate degree.

Donor(s): Friends and Associates of Herb Heimbecker
Qualification(s): Students registered in any OAC program, whom have completed a minimum of 10 credits who have demonstrated their passion and commitment to the agricultural and food industry through their extracurricular and/or volunteer activities during their Undergraduate degree and who aspire to have a career in the agricultural and food industry.
Amount: 1 award of $1,000
Priscilla and Stanford Reid Trust Prize [I0597]
Established in honour the first chair of the History Department, Stanford Reid, and his wife, Priscilla Reid to acknowledge the best paper written about the history of Presbyterianism and/or the Reformed tradition. Apply, by April 1, with a copy of the paper and a covering letter including contact information to the Department of History Awards Chair.

Donor(s): Priscilla and Stanford Reid Trust Fund
Qualification(s): Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.
Amount: 1 award of $500

Professional Staff Association Future Leader Scholarship [I1132]
This scholarship is provided to students whose leadership involvement makes a positive impact at the University of Guelph and/or the broader community. Apply by email to awards@uoguelph.ca by May 15 with one letter of reference and a personal statement (max. 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average will be awarded. This award may not be held more than once.

Donor(s): The Professional Staff Association (PSA)
Qualification(s): Students registered in any program who demonstrate involvement in leadership opportunities that result in positive community impact, and who are from the immediate family of full-time, part-time, contractual or retired members of the Professional/Managerial Group at the University of Guelph. Preference will be given to a student that has not received the Professional Staff Association Scholarship in the same year.
Amount: 1 award of $1,500

Project Hero Scholarship [I0979]
The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt.-Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent’s perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

Donor(s): University of Guelph
Qualification(s): Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.
Amount: Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

R.J. Watford Prize [C0304]
Recipients will have shown proficiency in the poultry courses in semesters 4 to 8. The student shall have a genuine interest in the poultry industry and special consideration will be given to a student who indicates a desire to establish some form of poultry production or who seeks employment in the poultry industry. Apply to the O.A.C. Awards Office by April 1 with a letter demonstrating poultry interests.

Donor(s): R.J. Watford
Qualification(s): Students graduating from a program offered by the O.A.C. with a demonstrated interest in the poultry industry.
Amount: 1 award of $500

R.W. (Bob) Pawley Scholarship [I0231]
Apply by May 15 to the OAC Dean’s Office (Awards) with a letter outlining your active participation or involvement in production agriculture. Awarded in the fall semester.

Donor(s): Mr. Robert W. Pawley, O.A.C. ’39
Qualification(s): Student registered in the B.Sc.(Agr.) program with at least 10.0 credits completed and who demonstrates active participation or involvement in production agriculture.
Amount: 1 award of $1,000

RB Palmer Horticultural Scholarship [I1083]
These scholarships were established by RB Palmer in support of students who are interested in plant breeding, plant genetics and horticulture. RB Palmer was particularly inspired by Ornamental Horticulture, lilies and gladiolas in particular. Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter (no more than two pages) listing the courses you have completed that demonstrate your interest in horticulture, plant genetics or plant breeding. Selection will be based on highest cumulative average.

Donor(s): RB Palmer Horticultural Fund
Qualification(s): Students registered in a program offered by the Ontario Agricultural College who demonstrate an interest in horticulture, plant genetics or plant breeding. Preference will be given to students who demonstrate an interest in Ornamental Horticulture.
Amount: 1 award of $1,000

Robert Harcourt Scholarships [I0121]
Established, by the estate of Mrs. R. Harcourt in memory of the late Dr. Robert Harcourt. Selection will be based on highest cumulative averages for those entering year 3 and year 4. One scholarship will be awarded to year 3 entering students and one to year 4 entering students. Application is not required.

Donor(s): Estate of Mrs. R. Harcourt
Qualification(s): Students entering year 3 having completed 9.0 credits and year 4 having completed 14.0 credits in a program offered by the School of Environmental Sciences.
Amount: 2 awards of $750
### Robert McCann Memorial Scholarship [I0184]

Mrs. Edward McCann offers this scholarship in memory of her son. Apply to the O.A.C. Awards Office with a letter by May 15.

**Donor(s):** Mrs. Edward McCann in honour of her son  
**Qualification(s):** Student who has completed the 4th semester level and entering the 5th semester level with an interest in agroecosystem management. The student must have obtained 70% standing at the end of the 4th semester level and must have been active in student activities.

**Amount:** 1 award of $1,000

### Ross Jones Memorial Prize [C0147]

In memory of Ross Jones, ’71 O.A.C., his friends, colleagues and classmates. Apply with a letter by April 1 to the O.A.C. Awards Office, OAC Dean’s Office.

**Donor(s):** Year ’71 O.A.C.  
**Qualification(s):** Graduating student who demonstrates the greatest potential in the area of Weed Science.

**Amount:** 1 award of $600

### Samuel Carr Prize [C0048]

Offered from the estate of Samuel Leister Carr. Apply by letter to the O.A.C. Awards Committee by April 1.

**Donor(s):** The estate of the late Samuel Carr

**Qualification(s):** Student completing the requirements for the B.Sc.(Agr.) program with a minimum of 70% standing in semester levels 7 and 8 and who has demonstrated willingness to assume responsibility and leadership in College and community activities. Preference will be given to candidates who, upon graduation, take an active part in the operation of a farm, that are involved with the management and day-to-day operation of the farm, farm related business, or horticultural enterprise and who have a capital investment in the farm or business.

**Amount:** 1 award of $1,500

### Scotiabank Scholarships in Leadership [I0834]

Apply to the Department of Management Awards Committee by May 15 with: 1) A 500 word personal statement describing the impact of their leadership practice in a non-profit setting including the benefits both to the student and to the organization; 2) Reference letter(s) from the organization(s) in which the leadership practice took place. In the event of a tie, the award will go to the student with the highest cumulative average. Please submit your application by email to: dom.awards@uoguelph.ca

**Donor(s):** Scotiabank

**Qualification(s):** Students who have completed the Foundations of Leadership course (HROB*2010) and either completed the required 120 hours of leadership practice for the undergraduate Certificate in Leadership in a non-profit setting or are registered in the Leadership and Organizational Management major of the BComm program and have demonstrated exceptional leadership in a non-profit setting.

**Amount:** 5 awards of $1,000

### Shur-Gain, Nutreco Canada Inc. Scholarship [I0307]

Provided by Shur-Gain, a member of Nutreco Canada Inc. to a student that demonstrates high academic achievement and evidence of leadership and contribution to the university and/or community life. Apply by May 15 to the O.A.C. Awards Office with a letter of not more than 2 pages outlining leadership contributions. Awarded in the fall semester.

**Donor(s):** Shur-Gain

**Qualification(s):** Students registered in Animal Science or Animal Biology majors who have completed between 8.0 and 11.0 credits.

**Amount:** 1 award of $750

### Sports Media and Sports Broadcasting Scholarships [I1035]

Apply by May 15th to Student Financial Services by submitting a one page letter outlining sports media or sports broadcasting experience in the past year. Letters can be emailed to awards@uoguelph.ca. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minoring in Media and Cinema Studies and who have the highest GPA.

**Donor(s):** Rogers Media Inc.

**Qualification(s):** Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas. To be awarded to an undergraduate student first, then to a graduate student if no undergraduate students apply.

**Amount:** 2 awards of $2,500

### Stephanie Wilken Volunteer Scholarship [I0449]

Established by the Wilken family in memory of Stephanie Wilken, BA 1995. Apply to Student Financial Services with letter indicating the kind and extent of volunteer activities at the Wellness Centre by October 1. Selection committee is the Senate Committee on Awards on the recommendation of the Student Wellness Educator at the Wellness Centre.

**Donor(s):** Bev and Darlene Wilken  
**Qualification(s):** Student registered in any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre.

**Amount:** 1 award of $1,000

### Summerlee Humanitarian Scholarships [I0964]

The Summerlee Humanitarian Scholarships are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues of global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a varsity athlete (varsity athletes should self-identify in their letter). While applicants who demonstrate past significant impacts in improving local communities/groups will be considered, preference will be given to applicants with strong previous proven international humanitarian efforts. Recipients must adhere to the University of Guelph’s Safe Travel Policy.

**Donor(s):** The Angel Gabriel Foundation

**Qualification(s):** Students registered in any program with no more than 17.0 credits who have demonstrated a commitment to humanitarian efforts and who have a capital investment in the farm or business.

**Amount:** 5 awards of $10,000 ($5,000 in each of the fall and winter semesters) plus an additional up to $4,000 to support travel costs

### Susan Travers Memorial Scholarship [I0975]

Established by friends, family and colleagues in Alumni Affairs and Development in Memory of Susan Travers. Susan believed in the value of education. She worked for the University of Guelph as a member of Alumni Affairs and Development and in the Department of Business. She not only encouraged her children to pursue post-secondary education, but led by example, pursuing her university degree as a mature student. Preference will be given to students registered in CSAHS and LANG. Selection will be based on highest cumulative average. No application required.

**Donor(s):** The staff in Alumni Affairs and Development and Friends

**Qualification(s):** Students who were accepted to the University of Guelph as a "mature student" applicant and who are currently registered in any degree program.

**Amount:** 1 award of $1,000

### T.K. Warley Agrifood Policy Prize [I0212]

Established by Prof. T.K. Warley, former Chair of the Department of Food Agriculture and Resource Economics and a faculty member of the Ontario Agricultural College from 1970 to 1991. Application is not required.

**Donor(s):** Professor T.K. Warley

**Qualification(s):** Student providing the best term paper written on a public policy issue relating to the agrifood system or rural society in courses such as AGEC*5030 Price and Production Analysis, AGEC*4000 Agricultural and Food Policy, and AGEC*4720 Special Study in Food Agriculture and Resource Economics.

**Amount:** 1 award of $500
IX. Scholarships and Other Awards, Bachelor of Science in Agriculture

Thomas H. Peters Scholarship [I0233]
Application is not required.
Donor(s): Friends and associates of Thomas H. Peters
Qualification(s): Student in any academic program of the University who has completed courses in Land Reclamation (e.g. CROP*2280, SOIL*3200), with a minimum of 10.0 credits completed. Applicants must have a minimum of 70% cumulative average and have demonstrated an interest and aptitude in the area of crops and land reclamation.
Amount: 1 award of $500

Toronto District Beekeeper’s Association Scholarship [I0285]
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application is not required.
Donor(s): Mr. Jack Robinson
Qualification(s): The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.
Amount: 1 award of $500

United Steelworkers Local 4120 Scholarship [I0293]
Apply to Student Financial Services by January 31 and provide the name of the USWA member and relationship to the applicant. If there is more than one eligible candidate, the award will go to the one who has attained the highest relative class standing in his or her previous full-time semester.
Donor(s): United Steelworkers LFU/4120
Qualification(s): Student who is a member or former member, or who is from the immediate family of a member of United Steelworkers LFU 4120, and who is entering semester 2, 3, or 4 of a degree or diploma program in the Winter semester with a minimum 70% cumulative average.
Amount: 1 award of $1,000

University of Guelph Alumni Legacy Scholarship [I0735]
Funded through donations made to the University of Guelph Alumni Memorial Fund in memory of deceased alumni. The recipient will be selected based on academic achievement and volunteer contributions to the University of Guelph community. Apply to Student Financial Services by May 15 with a cover letter indicating name, degree and year of graduation of alumnus/alumnus relative and a resume or summary of leadership and volunteer contributions to the University of Guelph community.
Donor(s): Various donors c/o University of Guelph Alumni Association Memorial Fund
Qualification(s): Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with both a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumnus/us of the University of Guelph or its founding colleges.
Amount: 1 award of $1,000

University of Guelph Retirees Association Scholarship [I0569]
Established in 2007 to acknowledge in-course student achievement. The student having the highest cumulative average will be selected and in the event of a tie, the student with the highest average in the last two semesters of full-time studies will be chosen. Apply by May 15th to Student Financial Services with a letter indicating name and relationship to a retiree of the University of Guelph. Recipients cannot hold this scholarship and another scholarship greater than $1,500 at the same time.
Donor(s): University of Guelph Retirees Association (U.G.R.U.)
Qualification(s): Students with a minimum cumulative average of 75% registered in a degree program who are related to a retiree of the University of Guelph as child, grand child or great grand child who have not held the scholarship before.
Amount: 1 award of $1,500

Van Stralen and Van Der Hoven Memorial Scholarship [I0296]
The scholarship will be awarded to the student who has demonstrated academic achievement and exemplary leadership. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca a one-page summary demonstrating leadership skills gained through participation in extracurricular activities, both within the university and the broader community. Preference will be given to students who have completed between 3 and 10 credits at the time of application for the award.
Donor(s): Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoven & family
Qualification(s): Students registered in any program who have achieved a minimum of 80% cumulative average and participated in extra-curricular activities.
Amount: 1 award of $2,000

W. Harold Minshall Scholarship [I0451]
Provided by Dr. W.H. Minshall (O.A.C.’33). Apply by May 15th to the OAC Awards Office (oacaward@uoguelph.ca) with a summary of participation in extracurricular activities and demonstrated interest and aptitude in crop protection of no more than two pages. Please include your name, student ID number and the name of the award on your application. This award may only be held once.
Donor(s): O.A.C. Alumni Foundation on behalf of Dr. W.H. Minshall
Qualification(s): O.A.C. students in the B.Sc. (Agr.), B.Sc. (Env.) or B.Sc. degree programs who have completed minimum of 15 credits, and one of the following courses in the previous fall, winter or summer semester: CROP*2420, ENVS*3020, ENVS*3210, ENVS*4100, ENVS*4180, and ENVS*4190.
Amount: 1 award of $1,000

W.C. Winegard Medal [C0311]
The W.C. Winegard Medal is the most prestigious and top convocation award presented to an undergraduate student at the University of Guelph. Named for former University President Dr. William Winegard, the medal is awarded in recognition of both academic achievement and contributions to the university and community life. One student will be nominated by each College Awards Committee. The Senate Honours and Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application is not required.
Donor(s): The Board of Governors of the University
Qualification(s): Students who are graduating in June, or who have graduated in the previous two convocations who excel both academically and in contributions made to the university and community life.
Amount: 1 award of a Gold medal

W.H. Waddell Prize [C0300]
Established by Professor W.H. Waddell. Apply to the O.A.C. Awards Office by April 1 with a letter demonstrating interest in Crop Science.
Donor(s): Professor W.H. Waddell
Qualification(s): Graduating student in the Agronomy major who has a high academic standing in plant breeding and in genetics and has demonstrated an interest in Crop Science.
Amount: 1 award of $350

W.N. Vaughan Medal [C0299]
A medal may be given annually to a student senator who has high academic standing and who has made a substantial contribution to student life and to the university, particularly through involvement in and commitment to Senate activities. Prospective candidates will be nominated by senators and the medal winner will be chosen by a committee selected by the Senate Bylaws and Membership Committee. The medal will be awarded at June convocation. No application is necessary.
Donor(s): Friends of Walter N. Vaughan
Qualification(s): Student senator who has high academic standing and who has made a substantial contribution to student life and to the University, particularly through involvement in and commitment to Senate activities.
Amount: 1 award of a Medal

Warren Stein Memorial Scholarship [I0955]
Apply by May 15th to the OAC awards committee (oacaward@uoguelph.ca) with a letter (maximum 2 pages) outlining your studies related to swine. Please include the name of the award and the award ID number in the subject line of your email and on your letter. Selection will be based on the highest cumulative average.
Donor(s): Canadian Swine Breeders Association
Qualification(s): Students registered in any program offered by OAC who have completed 10.0 credits or more and who are engaged in swine related studies.
Amount: 1 award of $2,000

William A. Brechin Scholarship [I0574]
Established to honour the work of Maryon Brechin’s husband, O.A.C. ‘36, who dedicated his career to soil and water quality concerns. Students must have a demonstrated interest and competence in soil and water quality issues such as employment or extracurricular experience in promoting environmental protection of soil and water resources. Apply by May 15 to the O.A.C. Awards Office (oacaward@uoguelph.ca) by letter of not more than two pages. Please include the name of the award and the award ID in the subject line of your email. Please also include it in your letter.
Donor(s): Maryon Brechin
Qualification(s): Any student registered in a major offered by the School of Environmental Sciences who has completed a minimum 15.0 course credits.
Amount: 1 award of $1,500

Last Revision: July 4, 2019
### In-course Scholarships with Financial Need

**Brian Kenneth Howard Memorial Scholarship [14548]**

Established by Kenneth and Irene Howard in memory of their son, Brian Kenneth Howard. Awarded to a student assessed as having financial need with a preference given to students from York, Durham or Simcoe counties. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Kenneth and Irene Howard with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Student registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $3,000

### City of Guelph 175th Anniversary Scholarship [10515]

Funded by a leadership gift from the City of Guelph and donations from business and community leaders, this scholarship was established in 2002. Apply to Student Financial Services by October 7 with a letter describing volunteer activities, one reference letter from an individual familiar with the volunteer and/or community service contributions, and a completed Financial Need Assessment Form (N.A.F.). Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need. This award may be held only once.

**Donor(s):** The Guelph Community Foundation

**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70.0% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.

**Amount:** 1 award of $2,000

### Dr. Kenneth & Nancy Lawless [14552]

Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Dr. Kenneth W. Lawless with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Student registered in any program offered by the Ontario Agricultural College who has completed at least 5 credits with a minimum cumulative average of 75% and has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $2,700

### Eleanor Morgan & Bill Archibald Scholarships [14540]

The family of Eleanor and Bill Archibald, with the assistance of the Ontario government’s OSOTF program, provide this scholarship in memory of their parents. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining community involvement to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** The Family of Eleanor & Bill Archibald with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in any program with a minimum of 5.0 credits who have cumulative 70% average, have demonstrated community involvement, and financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (See General Statements on Awards).

**Amount:** 1 award of $2,500

### Erin Demers Memorial Scholarship [10406]

The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.), along with one supporting reference letter from a Residence Assistant, Residence Manager, or Residence Officer.

**Donor(s):** Family and friends of Erin Katrina Demers

**Qualification(s):** Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

**Amount:** 1 award of $1,800

### Euclid-Hitachi Scholarships [14517]

Established by Euclid-Hitachi of Canada Ltd., with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

### Graham Family Incentive Scholarship [14506]

Provided by Harvey Graham (O.A.C.’39) with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** Harvey Graham O.A.C. ’39 with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students entering the fourth year of a four year degree program, maintaining at least a 70% program average and demonstrating financial need, who have previously received the Harvey Graham Bursary. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $6,000

### Guelph Campus Co-operative Centennial Scholarship [10867]

In recognition of the Guelph Campus Co-operative’s centennial anniversary and the students who founded it, this scholarship is awarded to a student who has demonstrated financial need. Preference will be given to students who are members of the Guelph Campus Co-operative. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form and a photocopy of your valid co-operative membership card.

**Donor(s):** Guelph Campus Co-operative

**Qualification(s):** Students registered in any program at the University of Guelph who have completed a minimum of 5.0 credits with a minimum cumulative average of 75% and have demonstrated financial need.

**Amount:** 1 award of $1,000

### Nora Spence Memorial Scholarship [14394]

This scholarship was created by George and Jane Spence in memory of their daughter Nora Spence, O.A.C. BSc.’06 with the aid of the Ontario government’s OTSS program. Selection will be based high academic achievement. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Jane and George Spence with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** BSc students registered in a major offered by O.A.C. who have a minimum cumulative average of 75% and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $1,750
### O.A.C. '52 Scholarships [14538]

Offered by the class of O.A.C. '52, with the assistance of the Ontario government's OSOTF program. Apply by letter highlighting involvement in leadership and community activities and/or university life along with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

| Donor(s): | O.A.C. '52 with matching funding through the Ontario Student Opportunities Trust Fund |
| Qualification(s): | O.A.C. students enrolled in the B.Sc(Agr.), B.Comm., B.Sc., or B.Sc.(Env.) programs who have demonstrated financial need, who are in good academic standing and who have demonstrated leadership. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). |
| Amount: | 5 awards of $3,250 |

### Residence Life Staff Scholarship [10697]

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date.

| Donor(s): | Student Housing Services |
| Qualification(s): | Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program. |
| Amount: | 2 awards of $500 |

### Returning Student Residence Scholarship [10696]

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must have resided in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award.

| Donor(s): | Student Housing Services |
| Qualification(s): | Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average. |
| Amount: | 3 awards of $500 |

### Robert S. and Ethelyne L. Fulkerson Scholarship [10382]

Established by Professor Robert S. Fulkerson, a former faculty member in the Department of Crop Science and graduate of O.A.C. in 1946, and his wife Ethelyne. Apply by October 7 with a completed In-Course Financial Need Assessment Form (N.A.F.) to Student Financial Services. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

| Donor(s): | Professor Robert S. and Ethelyne L. Fulkerson |
| Qualification(s): | Students enrolled in the Bachelor of Science in Agriculture with a major in CHATS or the Bachelor of Science with a major in Plant Science who have completed at least 14.0 CRD with at least a 70% cumulative average, an interest in crop production and have demonstrated financial need are eligible for this award. |
| Amount: | 1 award of $1,500 |

### Robert, Louis and Helen Shaw Memorial Degree Scholarships [14520]

Established by the Shaw Scholarship Committee with the assistance of the Ontario government's OSOTF program. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

| Donor(s): | The Shaw Scholarship Committee with matching funding through the Ontario Student Opportunities Trust Fund |
| Qualification(s): | Students registered in the BSc(Agr), BLA, BSc with a major in Plant Agriculture or BBRM.EQM programs with demonstrated financial need, and a 70% cumulative average Preference will be given first to first year students from Peterborough County and then to students from Peterborough County. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). |
| Amount: | Several awards of varying amounts |

### Tara Lynn Giuliani Memorial Scholarship [10375]

Funded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form. Selection is based on financial need.

| Donor(s): | Tara Lynn Giuliani Foundation at the Hamilton Community Foundation |
| Qualification(s): | Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services and who have demonstrated financial need. Preference given to students with a visual impairment. |
| Amount: | 1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000 |

### Walter and Marion MacDougald Scholarship [14530]

Established by the family of Walter and Marion MacDougald on the 50th wedding anniversary of their parents, in recognition of their gift of life-long learning to their five children, with the assistance of the Ontario government's OSOTF program. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter that includes a statement that outlines your interests in food supply, utilization, farmland conservation or woodland management. Preference will be given to students enrolled in a program involved in food supply or utilization, farmland conservation or woodland management. ACCESS AWARD.

| Donor(s): | Doug MacDougald, D.V.M. with matching funding through the Ontario Student Opportunities Trust Fund |
| Qualification(s): | Students demonstrating financial need with a minimum of 10.0 credits and less than 15.0 credits and who are in the following programs/majors/minors: BAgSc, BSc(Agr), BSc(Env), BSc(Food Science, Animal Biology, Nutrition, or Forest Science), or D.V.M., having a minimum cumulative average of 70%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). |
| Amount: | 1 award of $2,400 |

### William & Nona Heaslip Scholarship [10589]

Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7. Recipients of this award can have this award renewed for up to 3 years provided they continue to demonstrate financial need and maintain a minimum 70% cumulative average of full-time (minimum 80% of a full course load) study. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

| Donor(s): | The William and Nona Heaslip Foundation |
| Qualification(s): | Students that have completed 4.0 credits but no more than 6.0 credits in any degree program; are a Canadian citizen/permanent resident; have a minimum 70% cumulative average; and demonstrate financial need. |
| Amount: | 2 awards of $15,000 |

### In-course Bursaries

**Acer Saccharum Bursary [13083]**

Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and confirmation of registration with Student Accessibility Services.

| Donor(s): | Steven Ardron and Celine Batterink |
| Qualification(s): | Students registered in any degree program at the University of Guelph, who have demonstrated financial need and are registered with Student Accessibility Services. |
| Amount: | 1 award of $1,000 |
Archie and Isabelle (Cook) Rintoul O.A.C. Bursary [I3060]
Offered by Archie and Isabelle (Cook) Rintoul of O.A.C. ‘26 and MAC ‘27 respectively, with a completed Financial Need Assessment Form (N.A.F) by October 7 to Student Financial Services. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Archie and Isabelle (Cook) Rintoul

**Qualification(s):** Students registered in the department of Environmental Biology in the B.Sc., B.Sc.(Agr.) or the B.Sc.(Env.) degree programs who have completed a minimum of 10.0 credits and who have demonstrated financial need.

**Amount:** Several awards of varying amounts

Beef Farmers of Ontario Degree Bursaries [I3506]
Prior to 2017-18, this bursary was called the Ontario Cattlemen’s Association Degree Bursaries. Selection will be based on financial need. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Beef Farmers of Ontario and the O.A.C. Alumni Foundation

**Qualification(s):** Students with demonstrated financial need who have completed a minimum of 8.0 credits in the B.Sc., B.Comm. (Food and Agricultural Business), B.Sc.(Animal Biology) or B.Sc.(Fish Science) program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

Brinson Partners Inc. Bursaries [I3526]
Brinson Partners Inc., with the assistance of the Ontario government’s OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Brinson Partners Inc.

**Qualification(s):** Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

Burnbrae Farms Bursaries [I3525]
Established by Burnbrae Farms, with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement explaining interests in poultry science to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,000

Campbell-Ouellette Family Bursary [I3098]
Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family’s broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Dr. Malcolm Campbell

**Qualification(s):** Students registered in any program with demonstrated financial need.

**Amount:** 1 award of $2,000

Class of ‘72: 25th Reunion Bursaries [I3512]
Established by the Class of ‘72: 25th Reunion Fund with the assistance of the Ontario government’s OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Class of ’72: 25th Reunion with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 awards of $1,000

Class of O.A.C. ’33 Bursaries [I3531]
Established by the class of O.A.C. ’33 on the occasion of their 65th Anniversary, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Class of 1933 (in honour of the late Prof. W.L. Squirrel) with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

Class of O.A.C. ’36 Bursaries [I3501]
Established by the Class of O.A.C. ’36 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Class of 1936 with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** An O.A.C. degree student enrolled in any degree program who has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** several awards of varying amounts

David Havoic Bursary [I3087]
Established by the Havoic family, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to the student with the greatest financial need. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and attach a letter from Student Accessibility Services confirming registration and physical disability.

**Donor(s):** Debbie and David Havoic

**Qualification(s):** Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.

**Amount:** 1 award of $1,000

David R. Leach Memorial Bursary [I3534]
Provided in memory of David R. Leach by his family, with the assistance of the Ontario government’s OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. ’73 and graduated with a B.Sc. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7. ACCESS AWARD

**Donor(s):** Mrs Deborah Leach-Sartor with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students who are physically disabled as determined by the Student Accessibility Services with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,000

Denis and Patricia Yates Bursary [I3097]
Established by Charlotte Yates in memory of her parents who were strong advocates for the value of education in society. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Dr. Malcolm Campbell

**Qualification(s):** Students registered in any program with demonstrated financial need.

**Amount:** 1 award of $2,000
Donald P. Watson Bursaries in Horticultural Science [14501]
Established by the estate of Donald P. Watson, O.A.C.`34, with the assistance of the Ontario government’s OSO TF program. Preference will be given to students in BLA and the CHATS major in the BSc(Agr) degree program. Apply to Student Financial Services by October 7 and include a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): The estate of Donald P. Watson with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in BLA program, the BSc(Env) program, the Agriculture, CHATS, Organic Agriculture majors of the BSc(Agr) program, or the Plant Science major of the BSc program who have completed a minimum of 10.0 credits and who have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: several awards of varying amounts

Dr. Gordon Macleod Memorial Bursary [13093]
Established in memory of Dr. Gordon Macleod and in dedication to his interest in the dairy industry. Apply to Student Financial Services (awards@uoguelph.ca) with a completed Financial Need Assessment Form (N.A.F.) and a letter reflecting on your interest in dairy related studies by October 7. Please be sure to include your name, student ID number, your program of study and the award you’re applying to on your letter and application. Please email your application to awards@uoguelph.ca and include the award name and ID number in the subject line.

Donor(s): Cynthia Macleod
Qualification(s): Students registered in any degree program offered by OAC, who have financial need and who can demonstrate an interest in dairy related studies.
Amount: 1 award of $3,000

Dr. J. L. Tennant Bursaries [13064]
Established by the estate of Dr. J. L. Tennant, O.A.C. B.S.A 1913. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): The Estate of Dr. J. L. Tennant
Qualification(s): Students registered in BSAG or the Agricultural Economics major offered by the Department of FARE who have completed a minimum of 12.0 credits and have demonstrated financial need.
Amount: Several awards of varying amounts

Egg Farmers Ontario Bursaries [13507]
Provided by the Ontario Egg Producers’ Marketing Board and the O.A.C. Alumni Foundation with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. To be considered for this award you must indicate it on your N.A.F. and include a statement outlining your interest in the poultry industry. ACCESS AWARD

Donor(s): Egg Farmers Ontario with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with demonstrated financial need who have completed semester 2 and are enrolled in the B.Sc.(Agr.) or B.Comm.(Agricultural Business) programs and who have a 60% minimum cumulative average. Preference will be given to students who have demonstrated an interest in the poultry industry. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

Elizabeth Burton Bursaries [13503]
Mrs. Elizabeth Burton, with the assistance of the Ontario government’s OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

F. Elsie M. Brown and William R. Brown Bursary [13091]
Supported by a gift from the Estate of Fredelene Elsie May Brown and her deceased husband, William Robert Brown. Apply to Student Financial Services by Oct 7 with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Estate of Fredelene Elsie May Brown
Qualification(s): Students registered in any program offered by the OAC who have completed at least 10.0 credits and demonstrate financial need.
Amount: 2 awards of $2,500

Flower Deco Bursary [13095]
Apply by October 7 with a completed Financial Need Assessment Form to Student Financial Services and a letter explaining your interest in horticulture. In your letter, please include a list of the courses you have taken at U of G that demonstrate your interest in horticulture. Selection will be based on financial need.

Donor(s): Mr. Young-Hoon Song
Qualification(s): Students registered in any of the following programs are eligible for this award: Bachelor of Science in Agriculture with a major in Crop, Horticulture and Turfgrass Sciences or Bachelor of Science in Agriculture with a major in Honours Agriculture, or Bachelor of Science with a major in Plant Science or Bachelor of Landscape Architecture. Preference will be given to students with an interest in Horticulture.
Amount: 1 award of $2,000

Grant Misener Bursaries [13025]
Dr. Andrew Grant Misener, an alumnus of the University of Guelph, has provided this endowment fund. These bursaries provide financial assistance to students with established need and are distributed at the discretion of the University Bursary Committee. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Dr. Andrew Grant Misener
Qualification(s): Students registered in the B.Sc.(Agr.) program.
Amount: Several awards of varying amounts

Gryphon Investment Council Bursaries [13513]
Established by Gryphon Investment Counsel, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 2 awards of $1,500

Guelph Compassionate Health and Dental Bursary [13061]
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph’s mandatory Student Health Plan, University of Guelph’s Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment form; (2) a letter from physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and it’s impact on the student's studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) Insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

Donor(s): Student Health and Dental Plan Reserve
Qualification(s): Students currently registered at the University of Guelph and/or enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student’s academic progress.
Amount: Several awards of various amounts to a maximum of $1,500
**Guelph Student Assistance ACCESS Bursaries [I3556]**

These bursaries have been established and approved by undergraduate students through student referendum with the aid of the Ontario government's OTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** Several awards of varying amounts up to $1,000

---

**Guelph Student Assistance Program [I3056]**

These bursaries have been established and approved by undergraduate students through student referendum to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** Undergraduate Students

**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need.

**Amount:** Several awards of varying amounts up to $1,000

---

**Gwen Karr Memorial Bursary [I3010]**

Mr. T.K.C. Karr, O.A.C. ’32, has provided an endowment fund to assist students in a degree or diploma program of the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** Mr. T.K.C. Karr, O.A.C. ’32

**Qualification(s):** O.A.C. students with demonstrated financial need.

**Amount:** Several awards of various amounts

---

**Helen Mahon Memorial Bursary [I3063]**

Established in memory of Helen Mahon, a longtime employee of the University of Guelph and who, following the death of her husband, raised three young children alone, all of whom graduated from university. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a statement that indicates you meet the criteria of this bursary. Awarded in the winter.

**Donor(s):** Family and Friends of Helen Mahon

**Qualification(s):** Students registered in any program who come from a family where one parent is deceased.

**Amount:** 1 award of $500

---

**Howard and Myrtle Rogers Bursaries [I3537]**

Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

ACCESS AWARD

**Donor(s):** The Estate of Howard and Myrtle Rogers with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate ongoing financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 10 up to $2,000

---

**Indigenous Student Bursary [I3068]**

In 2009, the Ministry of Advanced Education and Skills Development established the Indigenous Student Bursary as part of their new Aboriginal post-secondary education funding initiative. These bursaries provide direct support to Aboriginal students with demonstrated financial need to assist with financing their education. Apply to Student Financial Services by October 7th with a Financial Need Assessment Form and complete the Indigenous Student Bursary application. Selection is based on financial need.

**Donor(s):** Ministry of Advanced Education and Skills Development (MAESD)

**Qualification(s):** Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP) and have demonstrated financial need.

**Amount:** several awards ranging in values from $1,000 to $3,500

---

**International Emergency Medical Aid Assistance [I3059]**

The University of Guelph provides support to international undergraduate students that are faced with unexpected, or unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an on-going basis.

**Donor(s):** University of Guelph

**Qualification(s):** International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.

**Amount:** Several awards of varying amounts

---

**Irvine and Grace Black Memorial Bursary [I3051]**

Established in memory of Irvine and Grace Black, by friends and family to recognize their many contributions to young people. Irvine, a well-known sheep breeder, was a judge at College Royal and the Royal Winter Fair for over fifty years, and Grace was active in the Women’s Institute and the Fergus Fall Fair. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining involvement in the 4-H Club and/or a Women’s Institute by October 7.

**Donor(s):** Family and friends of Irvine and Grace Black

**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to applicants who are, or have been, active in the 4-H Club and/or a Women’s Institute.

**Amount:** 1 award of $500

---

**Ivey Cook Bursaries [I3076]**

Apply to SAS using the “New Student Intake Form” and a letter explaining your situation and attach documentation showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first come first served basis, based on the validity and need for an assessment.

**Donor(s):** Suzanne Ivey Cook

**Qualification(s):** Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment.

**Amount:** several awards of up to $1,000

---

**Leroux Bursaries [I3535]**

Established by Mr. Hector Leroux, O.A.C.’44, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

ACCESS AWARD

**Donor(s):** Mr. J.H. Leroux with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** O.A.C. degree students in the B.Sc.(Agr.), B.Sc., B.Com. or B.Sc.Env. programs with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of varying amounts
## IX. Scholarships and Other Awards, Bachelor of Science in Agriculture

<table>
<thead>
<tr>
<th>Scholarships and Other Awards</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Madison Gough Memorial Bursary [I3103]</strong></td>
<td>Established by the friends and family of Madison Gough, a gentle, kind spirit who was inspired by nature, animals, or music and passionate about acceptance of difference. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Bob Gough and Laura Ladouceur</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students registered in any program who have demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td><strong>Mary I. Whitelock Bursaries [I3524]</strong></td>
<td>Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Estate of Mary I. Whitelock with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>13 awards of $2,000</td>
</tr>
<tr>
<td><strong>Masterfeeds Bursaries [I3514]</strong></td>
<td>Established by Masterfeeds and the O.A.C. Alumni Foundation, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Masterfeeds with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>O.A.C. students in B.Sc.(Agr.) Animal Science or B.Sc. Animal Biology majors who have demonstrated financial need and, at the time of application, have a cumulative average of 60%. Students may receive one or two bursaries annually. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
</tr>
<tr>
<td><strong>Métis Nation of Ontario Bursary [I3092]</strong></td>
<td>The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and a statement confirming Métis status and include your card number.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Métis Nation of Ontario</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.</td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td><strong>Murray P. And Florence L. Hannah Bursaries [I3571]</strong></td>
<td>Preference will be given to students from the County of Northumberland. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Estate of Florence Hannah with matching funding through the Ontario Trust for Student Support program</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>OAC students registered in the BSc(Agr) or the BSc(Env) program who have completed a minimum of 4.0 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
</tr>
<tr>
<td><strong>Norma Valeriote International Student Bursaries [I3009]</strong></td>
<td>Preference given to a student from a country of focus as defined by CIDA (Canadian International Development Agency). Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Mrs. Norma L. Valeriote</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several of varying amounts</td>
</tr>
<tr>
<td><strong>O.A.C. '38 Lloyd Minshall Bursaries [I3529]</strong></td>
<td>Established by O.A.C. '38 Alumni, with the assistance of the Ontario government's OSOTF program, to recognize the many contributions of Lloyd Minshall to his classmates and to O.A.C. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>O.A.C. '38 Alumni with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
</tr>
<tr>
<td><strong>O.A.C. '55 Access Bursaries [I3117]</strong></td>
<td>Provided by the class of O.A.C. '55 with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>O.A.C. Class of '55 with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students at any semester level in an O.A.C. degree program or students enrolled in the B.ENG. program with demonstrated financial need and a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
</tr>
<tr>
<td><strong>O.A.C. '57 Bursaries [I3518]</strong></td>
<td>Provided by the Class of O.A.C. '57 with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>O.A.C. '57 and the O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>O.A.C. undergraduate degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
</tr>
<tr>
<td><strong>O.A.C. Alumni Foundation Access Bursaries [I3533]</strong></td>
<td>Provided by the O.A.C. Alumni Foundation, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts</td>
</tr>
<tr>
<td><strong>OAC Student Aid Bursary [I3590]</strong></td>
<td>Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong></td>
<td>Anonymous with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong></td>
<td>Students registered in any OAC Undergraduate Degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong></td>
<td>Several awards of varying amounts totalling $8,000</td>
</tr>
</tbody>
</table>
Ontario Agri Business Association Degree Bursaries [I3502]
Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter (no more than two pages) outlining your involvement in extracurricular and/or community activities you have been involved in during their studies in the program. Selection will be based on financial need. ACCESS AWARD.

Donor(s): Ontario Agri Business Association with matching funding through the
Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in the B.Sc. (Agr.) program or in the B.Comm. with a major in Food and Agricultural Business. Preference will be given to students involved in extracurricular and/or community activities during their studies in the program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 3 awards of $1,000

Ontario Co-operatives R.P. Forshaw Bursary [I3013]
The Co-operatives, Credit Unions, friends and associates of Prof. R. P. Forshaw have established this bursary. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7 and a letter indicating membership of co-op or credit unions.

Donor(s): The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw
Qualification(s): Undergraduate students who have financial need. Preference may be given to candidates who have been or are members of a co-operative or credit union.
Amount: 1 award of $400

Ontario Federation of Agriculture Bursaries [I3520]
Provided by the Ontario Federation of Agriculture and the O.A.C. Alumni Foundation with the assistance of the Ontario government’s OSOTF program. Apply with a letter indicating 4H and/or rural community involvement and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. To be considered for this award you must indicate it on our N.A.F. and include a statement outlining your extracurricular activities. ACCESS AWARD

Donor(s): Ontario Federation of Agriculture with matching funding through the
Ontario Student Opportunities Trust Fund
Qualification(s): O.A.C. students with demonstrated financial need enrolled in the B.Sc. (Agr.), B.Comm., B.Sc. or B.Sc. (Env.) programs. Preference will be given to students from farm families who have participated in 4H and/or rural community activities. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

Ontario First Generation Bursary [I3062]
The Ministry of Advanced Education & Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.

Donor(s): Ministry of Advanced Education & Skills Development (MAESD)
Qualification(s): Students registered in any program who are first generation students, Ontario residents (as defined by OSAP) and who have demonstrated financial need.
Amount: several awards ranging in values from $1,000 to $3,500

Ontario Grape Growers Bursary [I3033]
Offered by the Ontario Grape Growers Action Committee. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): The Ontario Grape Growers Action Committee
Qualification(s): Students with good academic standing in semesters 3 to 6 of a degree program or semesters 3 to 4 of a diploma program administered by O.A.C., and demonstrated need of financial assistance.
Amount: Several of various amounts

Ontario Horticultural Association Bursary [I3089]
Preference will be given to students in the B.Sc. (Agr) CHAT major who are concentrating their studies in Horticulture Science. Apply with a completed Financial Need Assessment Form (N.A.F.) by October 7 to Student Financial Services and attach a letter listing the Horticulture courses you have taken. These may include any of the courses listed in the Horticulture Science Restricted Elective list listed in the Undergraduate Calendar for the B.Sc. (Agr) students majoring in CHAT.

Donor(s): Ontario Horticultural Association
Qualification(s): Students registered in the B.Sc. (Agr.) program majoring in Crop, Horticulture and Turfgrass Sciences (CHAT) who have completed a minimum of 4.0 credits and demonstrate financial need.
Amount: 1 award of $1,000

Ontario Pork (Degree) Bursary [I3049]
Provided by Ontario Pork Producers’ Marketing Board. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement indicating interests in pork production to Student Financial Services by October 7.

Donor(s): Ontario Pork Producers’ Marketing Board
Qualification(s): B.Sc.(Agr) and B.Comm., Agricultural Business major, students with demonstrated financial need who have completed semester 4 and who have satisfactory academic standing and an interest in pork production.
Amount: 1 award of $500

Robert Auger Humanitarian Bursary [I3058]
Established in memory of Bob Auger, a former Associate Registrar at the University of Guelph. It is intended as an emergency fund to assist students who unexpectedly find themselves in difficult financial situation who could benefit from receiving a grocery voucher. To be considered, students must have completed a Financial Aid Assessment form and arrange an appointment with a Financial Aid Counsellor. Appointments can be made by calling 519-824-4120 extension 58715.

Donor(s): Family and friends of Robert Auger
Qualification(s): Students registered in any degree program with an unexpected financial emergency.
Amount: Several grocery vouchers or book vouchers

Scotiabank Bursaries [I3352]
Established by Scotiabank, with the assistance of the Ontario government's OSOTF program, to assist students with financial need to continue their studies as full-time students. Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Scotiabank with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 2 awards of $1,500

Shirley Endean Bursaries [I3570]
These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Estate of Shirley E. Endean & multiple donors with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: Several awards of varying amounts

Student Financial Services Bursary [I3107]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph
Qualification(s): Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.
Amount: Several awards up to a maximum of $6,000
IX. Scholarships and Other Awards, Bachelor of Science in Agriculture

T.K. Warley Bursaries [I3510]
Established by O.A.C. Alumni Association, with the assistance of the Ontario government's OSOTF program, to recognize Professor T.K. Warley's significant contribution to the O.A.C. Alumni Foundation and to students through teaching and promotion/development of "Experience Agriculture." A degree student may receive this bursary twice. Apply by letter outlining extracurricular involvement and a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): O.A.C. Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students with demonstrated financial need who are in semester 5 to 8 of any degree program within O.A.C. A minimum 65% is required, as is participation in student activities, governance, and/or college affairs. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

Uffelmann Connor Family Bursary for Indigenous Students [I3109]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Métis or Inuit).

Donor(s): Maris Uffelmann and Dean Connor

Qualification(s): Students registered in any program who self-identify with First Nations (Status and non-Status), Métis or Inuit ancestry and who demonstrates financial need.

Amount: 1 award of $1,000

Uffelmann Connor Family First Generation Bursary [I3108]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as a first-generation student.

Donor(s): Maris Uffelmann and Dean Connor

Qualification(s): Students registered in any program who is a first-generation student (First generation students (parents did not attend post-secondary studies, full-time or part-time, in or outside Canada at any time or in any program) registered in any program with demonstrated financial need. and who demonstrates financial need.

Amount: 1 award of $1,000

University of Guelph Access Bursaries [I3522]
Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Alumni and Friend of the University of Guelph with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of $500. Several awards of $2,000

University of Guelph Alumni Association Access Bursaries [I3523]
Established by the University of Guelph Alumni Association, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): University of Guelph Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $1,250

University of Guelph International Bursary [I3048]
The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Students should apply to the International Student Advisor by Nov. 1 for the fall semester; March 1 for the winter semester, and July 2 for the summer semester with a completed International Student Financial Need Assessment Form (N.A.F.). If students have an emergency situation, please contact the International Student Advisor, in Student Life, University Centre, Level 3.

Donor(s): University of Guelph

Qualification(s): International students registered in a degree program who have competed a minimum of 4.0 credits and are registered in a minimum of 1.5 course credits.

Amount: Several varies

University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [I3047]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph

Qualification(s): Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

Amount: Several awards to a maximum of $2,000

University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph

Qualification(s): Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

Amount: Several awards up to a maximum of $6,000

University Student Assistance Program [I3057]
These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph

Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).

Amount: Several awards of various amounts to a maximum of $1,000

Virginia Conner Memorial Bursary [I3110]
Apply by October 7th to the Student Financial Services with a completed Financial Need Assessment form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Selection will be based on financial need.

Donor(s): Estate of Virginia Conner

Qualification(s): Students registered in any program offered by OAC with demonstrated financial need.

Amount: several awards of up to $2,000

William Barlow Memorial Bursary [I3101]
This bursary was created to recognize the farming contributions and community spirit of Mr. Barlow. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Mr. William Barlow

Qualification(s): Students registered in any program within the Ontario Agricultural College at the University of Guelph who is from Durham Region, Northumberland County, or County of Victoria including City of Kawartha Lakes and has demonstrated financial need.

Amount: 1 award of $3,000
## In-course Travel Grants

<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Qualification</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F.E. Wolff International Scholarship [T0313]</strong></td>
<td>Students registered in any program offered by OAC with a minimum 70% cumulative average and who are registered AGR*2500 (Field course in International Agriculture with field trip to Costa Rica).</td>
<td>several awards of varying amounts</td>
</tr>
<tr>
<td><strong>O.A.C. ’54 International Study Scholarship [T0586]</strong></td>
<td>Currently registered students in O.A.C. who are Canadian citizens or permanent residents with a minimum 75% cumulative program average who intend to participate in an exchange program, semester abroad, or field trip course.</td>
<td>2 awards of $3,000</td>
</tr>
<tr>
<td><strong>Varley and Lyon Exchange Scholarships [T0298]</strong></td>
<td>O.A.C. students registered in the Bachelor of Science in Agricultural Science (B.Sc. (Agr.)) or the Bachelor of Commerce with a major in Food and Agricultural Business (B.Comm. FAB) who are pursuing a course of study for one or two semesters at another college or faculty of agriculture in Canada or in another country.</td>
<td>several awards up to $5,000</td>
</tr>
</tbody>
</table>
# Bachelor of Science in Environmental Sciences

Please refer to the General Statement on Awards for:

- Award Eligibility
- ACCESS Awards Eligibility
- Ontario Student Opportunity Trust Fund (OSOTF) Program
- How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

## Entrance Scholarships

<table>
<thead>
<tr>
<th>Scholarship</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amos &amp; William Lowe Memorial Scholarship [E0158]</td>
<td>1 award of $2,000</td>
</tr>
<tr>
<td>Angelo Frank Agro Undergraduate Scholarship [E0520]</td>
<td>1 award of $1,500</td>
</tr>
<tr>
<td>Atkinson Family Scholarship [E0972]</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>B.Sc.(Env.) Alfred McInroy Cuddy Memorial Scholarship [E0670]</td>
<td>1 award of $2,000</td>
</tr>
<tr>
<td>Barry Lee Scholarship for Agricultural Excellence [E0797]</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scholarship</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amos &amp; William Lowe Memorial Scholarship [E0158]</td>
<td>Student entering any of the undergraduate degree programs of the Ontario Agricultural College.</td>
<td>William B. Lowe and Amos Edgar Lowe</td>
</tr>
<tr>
<td>Angelo Frank Agro Undergraduate Scholarship [E0520]</td>
<td>Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 - 4H projects.</td>
<td>The Frank Agro Estate</td>
</tr>
<tr>
<td>Atkinson Family Scholarship [E0972]</td>
<td>Students entering any degree program offered by the Ontario Agriculture College (OAC).</td>
<td>Amy and Bryan Atkinson</td>
</tr>
<tr>
<td>B.Sc.(Env.) Alfred McInroy Cuddy Memorial Scholarship [E0670]</td>
<td>Students entering the first semester of the Bachelor of Science in Environmental Sciences with a minimum of 80.0% admission average.</td>
<td>The Estate of Alfred McInroy Cuddy</td>
</tr>
<tr>
<td>Barry Lee Scholarship for Agricultural Excellence [E0797]</td>
<td>Students entering any undergraduate program offered by OAC.</td>
<td>Regional Municipality of Halton</td>
</tr>
</tbody>
</table>

## Board of Governors' Scholarships [E0317]

This scholarship is considered one of the University of Guelph's most prestigious entrance scholarships with only 25 awards being awarded each year. Recipients of this scholarship are entering their program with one of the highest admission averages of that cohort. The scholarship will be renewed each year provided recipients remain registered in full-time studies and achieve a minimum 80.0% average in their previous academic year of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80.0% or better average in the previous academic year of full time study. Payments lost cannot be added to the end of the award period. This award cannot be held with the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships. Application is not required.

<table>
<thead>
<tr>
<th>Qualification(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academically outstanding entering students with the highest admission average of the entering cohort.</td>
<td>25 awards of $20,000 (payable over 4 years of study)</td>
</tr>
</tbody>
</table>

## Chancellor's Scholarships [E0688]

This scholarship was established in 2009 in honour of current and past University of Guelph Chancellors and is considered one of the most prestigious entrance awards offered by the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extracurricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships, or the Board of Governors' Scholarships.

<table>
<thead>
<tr>
<th>Qualification(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students entering a degree program with a minimum 90% admission average who have taken leadership roles in activities that demonstrate an interest in international relations and development, or leadership roles in activities relating to arts and culture and demonstrate the potential to become a leader in society.</td>
<td>2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)</td>
</tr>
</tbody>
</table>

## December 6th Memorial Scholarship [E0005]

This scholarship, established by the Faculty Association, is awarded in memory of the fourteen women murdered in December 1989 at Ecole Polytechnique and is intended to attract women to a profession that is largely comprised of men. The recipient will be selected on the basis of academic performance. For continued eligibility beyond semester 1, the student must maintain a minimum of 70% cumulative average and full-time studies. Application is not required.

<table>
<thead>
<tr>
<th>Qualification(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Engineering and Physical Sciences.</td>
<td>1 award of $2,250 ($750 in each of semesters 1, 3 and 5).</td>
</tr>
</tbody>
</table>

## Dr. C. John Small Commonwealth Scholarship [I0611]

Established in honour of Dr. C. John Small, OAC BSA ’42, Hon. D. Law ’75, and his lifelong dedication to foreign service. Selection will be based on the assessment of:

- a one-page submission describing the significance for the student visiting Guelph to the program of study at the partner exchange University,
- two faculty references
- more than one-page each, and
- consistent high performance in course work completed, as documented by a transcript of grade/grades to date.

Applicants are encouraged to apply to the Centre for International Programs by May 1 for visiting during the subsequent Fall or Winter semesters with the above mentioned documents.

<table>
<thead>
<tr>
<th>Qualification(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students entering exchange students registered for at least one semester from a Commonwealth developing country who are pursuing studies or conducting research in the area of agriculture and rural development.</td>
<td>1 award of $1,500</td>
</tr>
</tbody>
</table>

## Dr. Jack Britney Scholarship [E0034]

Established in memory of Dr. Jack Britney, a graduate of 57A and O.A.C. ’60 and former faculty member in the former School of Food Agriculture and Resource Economics and Extension Education. Selection will be based on the students entering with the highest admission average. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a statement indicating the program and where the Diploma was taken and when.

<table>
<thead>
<tr>
<th>Qualification(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students entering any OAC degree program with a preference given to students who graduated from any University of Guelph Associate Diploma program.</td>
<td>1 award of $1,750</td>
</tr>
</tbody>
</table>
IX. Scholarships and Other Awards, Bachelor of Science in Environmental Sciences

Earl B. MacNaughton Entrance Scholarships [E0172]
Established by friends, faculty, staff, alumni and students of the University to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Emphasis during selection will be given to academic achievement in high school science and mathematics. Application is not required.

**Donor(s):** Earl B. MacNaughton

**Qualification(s):** Students with high academic standing, entering an honours program in the College of Engineering and Physical Sciences.

**Amount:** 4 awards of $2,000

Ed Carter/University of Guelph Faculty Association Scholarship [E0292]
Award is payable at $750 per annum in the student’s 1st, 3rd, and 5th semester levels, provided a cumulative average of at least a 70% is maintained. To receive the final payment, the recipient would normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.

**Donor(s):** University of Guelph Faculty Association

**Qualification(s):** Students entering any undergraduate degree program at the University of Guelph from Wellington county.

**Amount:** 1 award of $2,250 ($750 in the 1st, 3rd, and 5th semesters)

Ernie Kendall Science Entrance Scholarship [E0668]
Established by Ernest Kendall, O.A.C. B.S.A. 1932 and awarded to the student entering a science program with the highest admission average. Preference will be given to students that graduated from Elmina District School. This award is not tenable with the President’s Scholarships, the Lincoln Alexander Chancellor’s Scholarships or the Board of Governors’ Scholarships. Application is not required.

**Donor(s):** Ernest W. Kendall

**Qualification(s):** Students entering any science (B.Sc., B. Sc (Agr.), B.Sc.(Env.), B.Sc.(Tech), B.A.Sc., B.A.S., B.B.R.M., B.Eng.) degree program with a minimum 80.0% admission average.

**Amount:** 1 award of $2,000

Gordon McNally Memorial Scholarship [E0203]
In memory of Gordon McNally, Professor of Zoology in the Ontario Agricultural College (1934-1971) and College of Biological Science (1971-1979), who had a great interest in extracurricular activities. The recipient will be selected on the basis of academic performance and demonstration of outstanding contributions to extracurricular activities and/or community services. Apply to Student Financial Services (awards@uoguelph.ca) by April 15 with a letter demonstrating contributions to extracurricular activities.

**Donor(s):** Jean and Peter Gower

**Qualification(s):** Students entering any undergraduate degree program offered by the College of Biological Sciences.

**Amount:** 1 award of $500

Gordon W. Innes Scholarship [E0140]
Application is not required.

**Donor(s):** Gordon W. ‘Sparky’ Innes Scholarship Fund Committee of the Woodstock Agricultural Society.

**Qualification(s):** Student entering any degree program from Oxford County with the highest admission average.

**Amount:** 1 award of $1,000

Hardy International Student Scholarship [E0659]
Selection is based on the assessment of the student’s admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.

**Donor(s):** Mrs. Marion Hardy

**Qualification(s):** Full-time international students (defined as paying the international student tuition and fees) entering any degree program.

**Amount:** 1 award of $2,000

International Student Entrance Scholarships [E0408]
In support of the University’s strategic direction of internationalism, entrance scholarships are available each Fall semester to the top international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all relevant documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.

**Donor(s):** University of Guelph

**Qualification(s):** Students on a “student visa” entering an undergraduate degree program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.

**Amount:** Several awards ranging in value from $5,500 - $8,500

J.D. MacLachlan Scholarship [E0170]
Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.

**Donor(s):** The J.D. MacLachlan Trust

**Qualification(s):** Students entering any degree program at the University of Guelph.

**Amount:** 1 award of $1,500

Jack and Lillian MacDonald Scholarship [E0379]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in the first instance, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

**Donor(s):** Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald

**Qualification(s):** Entering students coming from the Six Nations Polytechnic (SNP).

**Amount:** 1 award of $900

James MacMillan Memorial Scholarship [E0494]
Established in memory of James MacMillan, his great uncle, by Austin Conway of Toronto. Selection will be based on highest cumulative average. Application is not required.

**Donor(s):** Austin Conway

**Qualification(s):** Students entering any program offered by OAC who graduated from an Associate Diploma program from the University of Guelph. Preference will be given to students from Eastern Ontario which includes the counties of Prescott and Russell, Stormont, Dundas and Glengarry, Lanark, Renfrew, Leeds and Grenville, Frontenac and Lennox and Addington; and the City of Ottawa and to students entering the Bachelor of Science in Agriculture or the Bachelor of Commerce in Food and Agricultural Business, or the Bachelor of Arts with a major in Food, Agricultural and Resource Economics (FARE).

**Amount:** 1 award of $2,500

Lincoln Alexander Chancellor’s Scholarships [E0689]
Established in 2001 in honour of Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This award cannot be held with the President’s Scholarships, the Chancellors’ Scholarships or the Board of Governors’ Scholarships.

**Donor(s):** Many Donors

**Qualification(s):** Students entering a degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.

**Amount:** 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)

McArthur-Humphries Scholarships [E0183]
An equal number of awards are available to students from each county. In the case of insufficient eligible applicants from one county, the awards will be given to eligible applicants from the other county. These scholarships are awarded to students with the highest admission averages. Application is not required.

**Donor(s):** Mrs. Marion Hardy

**Qualification(s):** Students entering any degree program with a minimum 75% admission average from Lanark and Wellington Counties.

**Amount:** 8 awards of $1,000
IX. Scholarships and Other Awards, Bachelor of Science in Environmental Sciences

OAC 1968 Scholarship [E1008]
The Class of OAC 1968 established this bursary to celebrate their 50th anniversary. In reflecting on many of their own experiences the class generously supports undergraduate students in any OAC program with demonstrated financial need. Selection will be based on greatest financial need. Students must maintain enrolment in an OAC academic program to maintain their award. Students do not need to continue to demonstrate financial need for all 4 years to continue to receive this award. Apply by April 15 with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) and a summary of agriculture related activities to Student Financial Services (awards@uoguelph.ca).

Donor(s): The Class of OAC 1968
Qualification(s): Students entering any OAC degree program who have demonstrated financial need. Preference will be given to students who participated in agriculture-related activities/organizations during their high school career such as Junior Farmers or 4-H.

Amount: 1 award of $10,000 (payable over 8 semesters)

OAC Specialist High Skills Major Program Scholarships (SHSM) [E0832]
The scholarships will be awarded to the 3 students with the highest admission averages. No application is required.

Donor(s): OAC Dean's Office Liaison Program
Qualification(s): Students entering any OAC undergraduate program with a minimum 75% admission average who are/were registered in the Specialist High Skills Major (SHSM).

Amount: 3 awards of $1,000

President's Scholarship [E0238]
Established in 1987 in honour of their donors or distinguished members of the University and are considered one of the most prestigious entrance awards at the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the Chancellors' Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Board of Governors' Scholarships.

Donor(s): A number of President's Scholarships have been named in honour of the following people and/or donors:

- Cecil H. Franklin and Ingrid Franklin
- Charles S. Humphrey
- Jack R. Longstaffe
- Burton C. Matthews
- Kathleen and Frederick Metcalf
- Lillian Stewart Usher

Qualification(s): In honour of Cecil Franklin, former Chair of the Board of Governors and Honorary Fellow of the University, the University of Guelph has named one of these twelve prestigious entrance awards to recognize his financial contributions and volunteer support to the President's Entrance Scholarship program. In memory of Charles S. Humphrey, a former President of Hart Chemical Company Canada Ltd. and long-time friend, the University has named one of these twelve prestigious entrance awards to recognize his financial contribution through his estate to the President's Entrance Scholarship program. The University of Guelph has named one of these twelve prestigious entrance awards in memory of Jack R. Longstaffe to recognize his financial contribution through his estate to the President's Entrance Scholarship program. The University of Guelph has named one of these twelve prestigious entrance awards in honour of Burton C. Matthews to recognize his insight and leadership in establishing the President's Entrance Scholarship program.

Amount: 1 award of $2,000

Project Hero Scholarship [E0979]
The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent's full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

Donor(s): University of Guelph
Qualification(s): Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

Amount: Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

Quinn Memorial Scholarship [E0578]
Established in memory of Ronald J. Quinn (O.A.C. ’35) to an entering O.A.C. international full-time or exchange student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application is not required.

Donor(s): Mrs. Helen Quinn (O.A.C. ’35
Qualification(s): Entering semester one of an O.A.C. program to an international full-time student or to an international exchange student with a preference to those students from developing nations.

Amount: 1 award of $2,000

Ted Morwick Scholarship [E0796]
Established by Ted Morwick, honorary alumnus. The student with the highest admission average will be selected. This award is conditional on maintaining a 80% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify. (i.e. The student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year.) If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with the Chancellors', President’s or Board of Governors' Scholarships. No application is necessary.

Donor(s): Mr. Edward (Ted) Morwick
Qualification(s): Students entering any degree program in the College of Arts.

Amount: 4 award of $8,000 (payable over four years.)

University of Guelph Entrance Scholarships [E0291]
The value of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student's financial account in two equal payments in the fall and winter semesters. Application is not required.

Donor(s): University of Guelph
Qualification(s): Students entering their first year of post-secondary studies for the first time with a minimum 85.0% admission average.

Amount: Several awards of $2,000, Several awards of $3,000
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Sponsor(s)</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. Penri Morris Memorial Scholarship [E0430]</td>
<td></td>
<td>Students entering first year of any undergraduate program from North Lambton Secondary School in Forest, Ontario, in their absence, from Lambton County, and their absence, from Ontario.</td>
<td>Prof. Rosalina Morris</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Walter and Halina Slabikowski Scholarship [E0766]</td>
<td></td>
<td>Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary education by April 15th.</td>
<td>Irene Thompson and Slabikowski Family</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Waterloo-Wellington Science &amp; Engineering Fair (WWSEF) Scholarship [E0619]</td>
<td></td>
<td>Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.</td>
<td></td>
<td>various awards of $1,000</td>
</tr>
<tr>
<td>Entrance Scholarships with Financial Need</td>
<td></td>
<td>Entering first year of any undergraduate program.</td>
<td></td>
<td>1 award of $500</td>
</tr>
</tbody>
</table>

**Bill Klopp Memorial Scholarship [E0150]**
- Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by April 15. Students must complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).
- Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.
- 1 award of $500

**Devine Family Scholarships [E4542]**
- Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of Governors member, with the assistance of the Ontario government's OTSS program. These scholarships will be given out once every four years, unless the incumbent fails to qualify. The scholarship is renewed in years two, three and four with continued demonstrated financial need and full-time registration; students are required to register for no less than 2.0 credits each semester. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the "Devine Family Scholarship Application". Deadline to submit the complete application (both parts, the E.N.A.F. and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Chancellors' Scholarships, but can be held with all other entrance awards. ACCESS AWARD.
- Students entering any degree program. Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.
- Irene Thompson and Slabikowski Family
- 1 award of $1,000

**Interhall Council Entrance Scholarship [E0636]**
- Established by the Interhall Council, the residence student government that programs, advocates and represents residence students to administration and Student Housing Services (www.interhall.ca), to ensure that the residence experience remains accessible to students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15.
- University of Guelph
- 5 awards of $1,000

**Kenneth O. Hammill-Blount Canada Scholarship [E4356]**
- Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government's OSOTF program. Selection will be based on greatest financial need from the President’s, Lincoln Alexander Chancellor’s or Chancellors' Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President’s, Lincoln Alexander Chancellor’s or Chancellors' Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. ACCESS AWARD.
- Students entering any undergraduate degree program. Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.
- Ross and Mary Lou Klopp
- 5 awards of $1,000

**The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund**
- Entering students who have applied for the President's, Lincoln Alexander Chancellor's or Chancellors' Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
- 1 award of $9,600 (payable in 8 payments of $1,200)
L. Norman Gibbins Microbiology Scholarship [E4392]

Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government’s OTSS program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): Family, friends and colleagues of Norman Gibbins with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering the Microbiology major in the B.Sc. program with a minimum 80% admission average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).

Amount: 1 award of $2,500

OAC 1966 Entrance Scholarship [E0903]

In recognition of the contribution made to our lives by the Ontario Agricultural College, the graduates of 1966 O.A.C have established this scholarship to assist a well-qualified student to come to Guelph and become an “Aggie”. Students must complete the online Entrance Financial Need Assessment form as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted) or by April 15.

Donor(s): Class of OAC 1966

Qualification(s): Students entering any degree program offered by O.A.C with demonstrated financial need and are Ontario residents.

Amount: 2 awards of $5,000

P.A.J. Clarke Family Scholarship [E0381]

Paul and Aileen Clarke and their family established the endowment for this entrance scholarship in honour of Paul’s father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining extracurricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not a requirement. This award is not tenable with the President’s Scholarships or Lincoln Alexander Chancellor’s Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

Donor(s): Paul and Aileen Clarke

Qualification(s): Students with a minimum 80% average with a record of leadership and community participation. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm.

Amount: 1 award of $12,000 (payable over 4 years)

Robert C. Skipper Scholarship [E0485]

Established by Robert C. Skipper, Diploma in Agriculture 1948 and B.S.A. 1951. Selection will be based on academic standing, participation in extra-curricular activities and involvement in primary production and/or rural community activities. Financial need may also be considered. Apply to Student Financial Services (awards@uoguelph.ca) by April 15 with a one-page summary outlining activities and by completing the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.).

Donor(s): Mr. Robert C. Skipper

Qualification(s): Students entering a degree program in O.A.C that have graduated with a Diploma in Agriculture or Horticulture from the University of Guelph’s Ridgetown campus.

Amount: 1 award of $750

Rol-Land Farms Scholarships [E4519]

Established by Rol-Land Farms, with the assistance of the Ontario government’s OSOTF program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

Donor(s): Rol-Land Farms with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students entering a degree program with demonstrated financial need and a minimum 80% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).

Amount: 13 awards of $2,000

Entrance Bursaries

Charlebois-Vézeau Family Bursary in Economics [E3073]

Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15.

Donor(s): Charlebois-Vézeau Family

Qualification(s): Students entering any program offered by the Department of Economics and Finance, Gordon S. Lang School of Business and Economics with demonstrated financial need.

Amount: 1 award of $1,000

Costco Wholesale Bursary [E3579]

This award was created to assist first-year students in obtaining a post-secondary education in business-related studies. Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15.

Donor(s): Costco Wholesale with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering any program offered by the Gordon S. Lang School of Business and Economics with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $2,000

Dorothy Wright Entrance Bursary [E3075]

Established in memory of Miss Dorothy Wright, sister, and Miss Dorothy Wright, aunt, of Mr. Irving Wright, OAC 65A This bursary supports students entering any undergraduate degree program offered by the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F.) to Student Financial Services by April 15.

Donor(s): Mr. R. Irving Wright

Qualification(s): Students entering any OAC degree program who have demonstrated financial need.

Amount: 1 award of $1,000

Elizabeth Maud Hunter (Shier) Bursary [E3575]

This award was created to assist first-year students in obtaining a post-secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing a similar situation. Preference given to a student from the County of Brock. Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F.) for Entrance Awards. ACCESS AWARD

Donor(s): The Estate of the Late William Henry “Harry” Hunter with matching funding through the Ontario Trust for Student Support program

Qualification(s): Students entering any degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 3 awards of up to $4,500

First Year Student Residence Bursary [E3066]

These 5 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the online Financial Need Assessment Form for Entrance Awards by April 15.

Donor(s): Student Housing Services

Qualification(s): Students entering any degree program with demonstrated financial need.

Amount: 5 awards of $500

Last Revision: July 4, 2019
Fred Hindle Bursary [E3500]
Awarded in memory of Fred Hindle, O.A.C.'38, a long-time generous supporter of his Alma Mater, who at the time of his death, wanted future students to have the same opportunity for an education as he had received. This bursary is awarded with the assistance of the Ontario government's OSOTF program. This bursary is dependent on continued demonstration of financial need and successful completion of study to advance into the next year. Students should complete the online Financial Need Assessment Form (N.A.F) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD.
Donor(s): W. Roy Hindle and family with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Entering O.A.C. degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).
Amount: 1 award of $6,000 (payable over 4 years)

Harvey Graham Bursary [E3030]
Provided by Harvey Graham (O.A.C. '39). Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a working farm and complete the online Financial Need Assessment Form for Entrance Awards (N.A.F) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).
Donor(s): Harvey Graham, O.A.C. '39
Qualification(s): Students entering any degree program who come from a working farm and who have demonstrated financial need. Preference will be given to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.
Amount: 1 award of $1,500

International Student Entrance Bursaries [E3043]
In support of the University’s strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students entering an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar’s Entrance Award Application to Student Financial Services.
Donor(s): University of Guelph
Qualification(s): Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.
Amount: Several awards ranging in value from $1,000 to $3,000

John A. Carther Bursary [E3086]
The late John A. Carther of Cornwall Ontario has created the John A. Carther Bursary to support students from Eastern Ontario. Preference will be given to students from the counties of Stormont, Dundas and Glengarry. Apply to Student Financial Services by April 15th by completing the online Financial Need Assessment Form for Entrance Awards (N.A.F).
Donor(s): The estate of John A. Carther
Qualification(s): Students entering any program offered by the Ontario Agricultural College with demonstrated financial need.
Amount: 1 award of $2,000

McCracken Family Bursaries [E3580]
Ron and Doreen McCracken from Scotland Ontario have created these bursaries in memory of his mother and father who farmed near Cobourg Ontario. These bursaries will provide opportunities for students to study agriculture and food at the OAC. Preference will be given to students who have graduated from high school with a Specialist High Skills Majors Program (SHSM). Apply with a completed Financial Need Assessment Form for Entrance Awards (N.A.F) to Student Financial Services by April 15. ACCESS AWARD.
Donor(s): Ron and Doreen McCracken with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students entering any undergraduate degree program offered by OAC with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
Amount: 5 awards of $3,000

Registrar’s Entrance Bursaries [E0384]
Established by the University of Guelph to support entering undergraduate students with identified financial need. Students should complete the online Financial Need Assessment Form for Entrance Awards (N.A.F) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Bursary, but can be held with all other entrance awards.
Donor(s): University of Guelph
Qualification(s): Students entering any degree program with a minimum registration of 1.5 credits and demonstrated financial need.
Amount: 500 awards of $4,000

Robert Arthur Stewart Bursaries [E3272]
Established in memory of Mrs. Elsa H. Stewart of Pakenham, Ontario. Mr. Stewart graduated from the Ontario Agricultural College in 1933 and Mrs. Stewart from Macdonald Institute in 1932. Applicants for these bursaries should have a good academic record and an active interest in community affairs. A letter from the student and a recommendation from the County agricultural representative or the secondary school principal should be sent to Student Financial Services by April 15. Students should complete the online Financial Need Assessment Form for Entrance Awards (N.A.F) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15.
Donor(s): The Estate of Mrs. H. Stewart
Qualification(s): Students from the Ontario Counties of Lanark and Renfrew, and the Regional Municipality of Ottawa-Carleton, entering the 1st semester of a degree program at the University of Guelph.
Amount: 14 awards of $1,000

Steven Jones Memorial Bursaries [E3077]
Established by Mr. and Mrs. Jones in memory of their late son, Steven Jones (B.Comm. '97). Apply with a completed Financial Need Assessment Form for Entrance Awards (E.N.A.F) to Student Financial Services by April 15. Selection will be made on demonstrated financial need.
Donor(s): Mr. Harry Jones
Qualification(s): Students entering any degree program with demonstrated financial need.
Amount: several awards of $2,000

University of Guelph Accessibility Bursaries [E3038]
Established by the University of Guelph to support students with substantial demonstrated financial need. In addition, students will be automatically approved for to participate in the work-study program conditional on the student securing a work-study approved position on campus. Participating in the work-study program is not required to hold this bursary. Payments of this award and the eligibility to participate in the work-study program are conditional upon the recipient receiving funding through their provincial/territorial and/or federal student loan assistance program and registration in a minimum of 1.5 credits. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F) application as soon as they receive their Acknowledgment Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. Students do not need an offer of admission to submit the E.N.A.F. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Bursary, but can be held with all other Entrance Awards.
Donor(s): University of Guelph
Qualification(s): Students entering any degree program with demonstrated financial need and a minimum registration of 1.5 credits.
Amount: 200 awards of $14,000 (payable over 4 years) plus Work-study approval

Veriphy Skincare Scholarship for Women in STEM [E1092]
Supporting women and the pursuit of education in STEM are intrinsic values for the Veriphy Founders. To support this commitment this scholarship has been established through the University of Guelph, where PhytoSpherix™ was discovered. Apply by completing the Financial Need Assessment Form for Entrance Awards (E.N.A.F) by April 15. Selection will be based on greatest financial need.
Donor(s): Veriphy Skincare Inc.
Qualification(s): Female students entering a program offered by the College of Engineering and Physical Sciences with a minimum 80.0% admission average and demonstrated financial need.
Amount: 1 award of $1,000
In-course Scholarships

Aboriginal Student Engagement Scholarship [I0922]
Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA’s commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status), Métis or Inuit and outlining volunteer/leadership experience within the Aboriginal community. The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but not be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

Donor(s): Aboriginal Student Association
Qualification(s): Students registered in any program who self-identify as First Nation (status and non-status), Métis or Inuit, who are engaged in the Aboriginal community either in their home community or at the University of Guelph.
Amount: 1 award of $1,000

Alumni House Call Centre Scholarship [I1020]
Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15th with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

Donor(s): Former Employees of the Alumni House Call Centre
Qualification(s): Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.
Amount: 1 award of $1,000

Alun Joseph Tribute Scholarship [I0756]
Selection will be based on significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities in the following academic year. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

Donor(s): Dr. Alun Joseph Dean of the College of Social and Applied Human Sciences from 2000-2010 & Mrs. Gillian Joseph (CSS BA ’94, FACS MSC ’96) along with contributing donors to the Alun Joseph Tribute Fund
Qualification(s): Full-time students registered in any program offered by the College of Social and Applied Human Sciences with a minimum 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the following academic year.
Amount: 1 award of $2,000

Amina Kapadia Memorial Scholarship [I1093]
This scholarship was created and funded by the Kapadia Family and Department of Chemistry, in the memory of Ms. Amina Kapadia who died with her parents in a tragic house fire on February 14, 2017.

Donor(s): The Kapadia Family
Qualification(s): Student registered in the Biological and Pharmaceutical Chemistry major who completed CHEM*1040 in the previous academic year (fall/winter/summer).
Amount: 1 award of $1,000

Bill Taylor Memorial Scholarship [I0280]
Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.

Donor(s): AMF Canada Ltd.
Qualification(s): Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or intercollegiate athletics.
Amount: 1 award of $900

Blackburn Scholarship [I0404]
In commemoration of the 125th Anniversary of the Ontario Agricultural College, Dr. D.J. Blackburn, a retired faculty member of the former Rural Extension Studies program and former Director of the Associate Diploma Program has established this scholarship. Apply by letter, citing athletic contributions, to the O.A.C. Awards Committee (oacaward@uoguelph.ca) by May 15. Please include our name, student ID number and the name of the award on your application.

Donor(s): D.J. Blackburn
Qualification(s): O.A.C. degree or diploma student who has participated in intercollegiate athletics and maintained a minimum cumulative average of 70% while registered at Guelph. Athletic excellence and leadership will be used to determine the recipient. Students who have completed up to 3 years of study are eligible.
Amount: 1 award of $1,000

Braithwaite Business Scholarships [I0827]
Named in honour of Professor Bill Braithwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15th with a resume and 500-word statement describing why business courses, in addition to their major, will benefit their future career. Shortlisted applicants may be invited for an interview with the LANG Awards Committee. Selection is based on the student who best describes why taking business courses, in addition to their major, will benefit their future career. Students may hold this award only once.

Donor(s): Anonymous
Qualification(s): Students registered in any degree program, with the exception of B.Comm., who have successfully completed 1.0 credits towards the Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150 Introduction to Canadian Business or students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) who have completed 1.0 credits towards the minor.
Amount: 10 5000 (payable over 2 semesters)

Bridge Builder Scholarship [I1050]
The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Apply to Student Financial Services by May 15th with a one page letter outlining the volunteer activities that lead to social connections, breaking down barriers, and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people through one or more of the following: Civic engagement by facilitating community engagement, social integration and volunteerism to promote inclusion for immigrant and ethno-cultural communities; Social connections by promoting social connections and employment networking, including programs that reduce barriers and increase support for vulnerable groups; Education and empowerment by promoting intercultural understanding and break down barriers to participation in community life and decision-making. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.

Donor(s): Muslim Society of Guelph
Qualification(s): Students registered in any program who, through volunteer activities in the local community, have demonstrated a passion and commitment for building bridges in one or more of the following ways: facilitating social connections; breaking down barriers; and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people.
Amount: 1 award of $1,000

Bruce W. Minshall Memorial Scholarship [I0450]
Provided by Dr. W.H. Minshall (O.A.C.’33) in memory of his son Bruce, a graduate of O.A.C. in 1970. Apply by May 15 to the OAC Awards office (oacaward@uoguelph.ca) by letter listing contributions taken in the area of crop protection. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

Donor(s): O.A.C. Alumni Foundation on behalf of Dr. W.H. Minshall
Qualification(s): O.A.C. students in the B.Sc. (Agr.), B.Sc. (Env.) or B.Sc. degree programs who have completed semester level 6 or are eligible. Interest in crop protection and achievement in courses such as CROP*4240, ENVB*3030, ENVB*3210, ENVB*4100, and ENVB*4240 will be considered. Awarded to the student with an interest in crop protection and showing the greatest improvement in academic standing since entering the program.
Amount: 1 award of $1,000
Canadian Agri-Marketing Association (Ontario) Scholarship [I0541]
Selection will be based on a combination of academic achievement and greatest demonstrated interest in agri-marketing. Apply to the OAC Awards Office by May 15 with a summary of participation in the CAMA Student Chapter and/or involvement in agri-marketing initiatives as well as a letter of recommendation from a faculty member. This award may only be held once.

Donor(s): Canadian Agri-Marketing Association (Ontario)
Qualification(s): Students registered in any program offered by OAC who have completed a minimum of 10.0 credits with a minimum 70% cumulative average and are active members of the CAMA Student Chapter and/or involved in agri-marketing initiatives.
Amount: 1 award of $1,000

Carolyn Oke Langill Community Outreach Scholarship [I1043]
Students should apply by May 15 with a 500 word letter which describes previous volunteer work in the first two years of university and their interest in children and families. Selection will be based on the student’s commitment to community engagement and volunteerism as demonstrated by a 500 word letter describing previous volunteer work in the first two years of university and an interest in children and families. Applicants may be involved in a project at a local, national or international level and must provide a budget for the intended work or travel. Travel must be curriculum approved.

Donor(s): Carolyn Oke Langill, FACS alumna of 1980
Qualification(s): Students registered in any program offered by the College of Social and Applied Human Sciences who have completed between 10.0 and 15.0 credits and who are participating in curriculum-embedded experiential learning in the following academic year.
Amount: 1 award of $2,500

CBS Student Council Academic Scholarship [I0744]
The CBS Student Council provides this scholarship to recognize and further encourage the academic and extracurricular achievements of CBS students. Selection will be based on academic achievement, extracurricular activities and personal essay. Apply to the CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) by May 15 with a completed application form listing academic awards, scholarships, research experience, publications and extra-curricular activities along with a 500 word personal essay outlining how the academic achievements and extra-curricular activities contribute to academic and personal goals. Award may be held only once.

Donor(s): CBS Student Council
Qualification(s): Full time students registered in a major offered by the College of Biological Science who have completed at least 10.0 credits with a minimum cumulative average of 85%.
Amount: 1 award of $2,500

CBS Student Council Extracurricular Achievement Scholarship [I0745]
The CBS Student Council provides this scholarship to recognize and further encourage the academic and extracurricular achievements of CBS students. Selection will be based on breadth of extra-curricular activities, academic achievement and personal essay. Apply to the CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) by May 15 with a completed application form listing extra-curricular activities, academic awards, scholarships, research experience and publications along with a 500 word personal essay outlining how the extra-curricular activities and academic achievements contribute to academic and personal goals. Award may be held only once.

Donor(s): CBS Student Council
Qualification(s): Full time students registered in a major offered by the College of Biological Science who have completed at least 10.0 credits with a minimum cumulative average of 85%.
Amount: 1 award of $2,500

CBSAA Student Scholarship [I0885]
Established to recognize academic excellence and extracurricular involvement. Selection will be based on extracurricular involvement and demonstrated strong leadership at the University of Guelph, with a preference for students who are involved in college clubs and activities. This scholarship is not tenable with the CBS Student Council Extracurricular Achievement Scholarship. Apply to CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) including a one page letter of application describing extracurricular involvement on campus by May 15.

Donor(s): CBS Alumni Association (CBSAA)
Qualification(s): Students registered in any major offered by CBS who have completed between 4.0 and 10.0 credits with a minimum 80% cumulative average.
Amount: 1 award of $1,000

CFRU Volunteer Scholarship [I0215]
The award is presented to the student who has made the most significant contribution to the operation and goals of CFRU. Apply to Student Financial Services by May 15 with a letter describing the contributions made as a volunteer with CFRU and how those contributions have supported the operation and furthered the goals of CFRU.

Donor(s): CFRU Alumni
Qualification(s): Students registered in any program with a minimum cumulative average of 70% who have volunteered at CFRU for at least one year.
Amount: 1 award of $1,000

Charles McGowan Memorial Prize [C0187]
Established in memory of the late Lieutenant Charles McGowan. Application is not required.

Donor(s): Charles McGowan Memorial Fund
Qualification(s): Outstanding graduating student in an O.A.C. degree program.
Amount: 1 award of $200

Christina Victoria Kenny Memorial Scholarship [I1018]
The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.

Donor(s): Family and Friends of Vikki Kenny
Qualification(s): Students registered in any degree program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.
Amount: 1 award of $1,000

Class of ’51 O.A.C. Leadership Prizes [C0063]
Established by Year ’51 O.A.C., on the occasion of its 45th anniversary. Selection will be based on significant demonstrated leadership in College and/or University extracurricular activities. Apply to the OAC Awards office (oacaward@uoguelph.ca) by April 1 with a letter outlining your demonstrated leadership in College and/or University extracurricular activities. Please include our name, student ID number and the name of the award on your application.

Donor(s): Year ’51 O.A.C.
Qualification(s): Students who have graduated or are graduating in the previous Fall or Winter semesters from any degree or associate diploma program in the OAC, Guelph campus.
Amount: 3 awards of $3,000

Class of ’67 O.A.C. Centennial Scholarship [I0067]
Apply by May 15 to the OAC Awards office (oacaward@uoguelph.ca) with a letter outlining participation in extracurricular activities in all branches of college life. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

Donor(s): Class of O.A.C. ’67
Qualification(s): Student majoring in an O.A.C. department who through activity in all branches of college life as well as scholastic achievement has made an outstanding contribution to the University.
Amount: 2 awards of $2,000

Class of 1970 Scholarship [I0424]
Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.

Donor(s): Class of 1970: 25th Reunion Gift
Qualification(s): Outstanding student in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Dean’s Honours List.
Amount: 1 award of $1,400
Class of Mac 1964 Scholarship [I1033]
Apply to the CSAHS Awards Committee by May 15th with a one page letter outlining your experiential learning opportunity and the impact it had on your academic studies. Selection will be based on the student who best describes how their experiential learning positively impacted their academic studies. Preference will be given to students who best explain how their experiential learning has directly benefited their area of study within CSAHS; highest cumulative average will be used in the case of a tie.

Donor(s): The Class of Mac 1964
Qualification(s): Students registered in the College of Social and Applied Human Sciences with a minimum cumulative average of 75% and a minimum of 10.0 credits who have participated in experiential learning including curriculum-embedded experiential learning, placements, field courses and international travel opportunities within the last 3 semesters.

Amount: 1 award of $1,500

Clayton and Dorothy Switzer Scholarships [I0276]
Apply by May 15th to the OAC Awards Office (oacaward@uoguelph.ca) with a letter outlining how you have demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal. Awarded in the fall semester. Please include our name, student ID number and the name of the award on your application.

Donor(s): Clayton and Dorothy Switzer
Qualification(s): Students registered in a degree program offered by O.A.C. with a minimum of 10.0 credits completed, at least a 70% cumulative average and has demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal.

Amount: 1 award of $2,500

College of Engineering and Physical Sciences Graduation Prize [C0075]
The winner will be selected in May from all students who have completed the program in the previous twelve months. Application is not required. One award of $1000 and a commemorative plaque.

Donor(s): College of Engineering and Physical Sciences
Qualification(s): Students who are graduating in June, or who have graduated in the previous Winter or Fall convocations with the highest cumulative average from an honours program offered by the College of Engineering & Physical Sciences.

Amount: 1 award of $1,000, 1 Commemorative plaque

Collins Barrow Scholarship [I0040]
Offered by Collins Barrow, a national firm of Chartered Professional Accountants. Selection will be based on the student who has achieved the highest grade in the course ACCT*3330, Intermediate Financial Accounting, in the past academic year. In the event of a tie, the award will go to the student with the highest cumulative average. Application is not required.

Donor(s): Collins Barrow - Wellington Dufferin District
Qualification(s): Students who have successfully completed the course ACCT*3330, Intermediate Accounting.

Amount: 1 award of $1,000

CSAHS SA Student Leader Scholarship [I0864]
Selection will be based on contributions to college-related activities. Apply to the CSAHS Awards Committee by May 15 with a one page letter outlining volunteer experience within the college.

Donor(s): CSAHS Student Alliance
Qualification(s): Full-time students registered in any program offered by the College of Social and Applied Human Sciences who have completed a minimum of 8.0 credits and can demonstrate involvement in college-related volunteer activities.

Amount: 1 award of $1,000

Dairy Challenge Prize [I0811]
Supported by The Madsen Dairy Cattle Research Fund, the Dairy Challenge Prize will be awarded to students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge. No application is required.

Donor(s): Madsen Dairy Cattle Research Fund
Qualification(s): Students registered in a program offered by OAC who have completed ANSC*4230 Dairy Challenge Option and participated in the North American Intercollegiate Dairy Challenge.

Amount: several awards up to $2000

David F. Boyes Apiculture Scholarship [I0031]
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application is not required.

Donor(s): The Apiculture Club
Qualification(s): Student registered in the Fall semester who achieves high academic standing in Introductory Apiculture (ENVB*2210) in the previous year, demonstrates an interest in apiculture and who has participated in extracurricular activities.

Amount: 1 award of $200

Deans' Scholarships [I0323]
This award was established by the Board of Governors in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.

Donor(s): Board of Governors
Qualification(s): Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.

Amount: 150 awards of $2,000

Don Posterski Memorial Travel Grant [T1105]
Established in memory of Don Posterski - a trusted advisor and friend to the Barrett Family Foundation. This travel grant recognizes Don Posterski’s role and leadership in helping establish the sustainability partnership between the University and The Barrett Family Foundation. Mr. Posterski was a national Christian leader and had a distinguished career at World Vision Canada.

Donor(s): Alumni Affairs & Development - University of Guelph
Qualification(s): Students registered in International Development (CSAHS) who have completed at least 10.0 credits with a minimum cumulative average of 70% and who demonstrates the desire and aptitude to help build capacity and address social issues in international communities and are participating in any course related international travel. Apply to CSAHS Awards committee with a letter outlining proposed travel plans and academic purpose accompanied by a letter of support from a faculty member or student in and an overall travel budget.

Amount: 1 award of $1,000

Donald I. Broadfoot Scholarship [I0994]
This scholarship was created in honour of Donald Broadfoot who graduated from OAC in 1950. He worked for Hy-Line Poultry (a division of Pioneer Corn Company) in the US and Canada from 1950-1974 where he conducted disease and genetic research, and during that time did a lot of work which led up to effective treatments for various diseases in poultry. Apply by May 15 to the OAC Awards Committee (oacaward@uoguelph.ca) with a letter (no more than 2 pages) outlining your interest in poultry science. Please include relevant work experience; relevant volunteer experience and/or relevant research projects that demonstrate this interest. Please include the name of the award and the award ID number in the subject line of your email as well as on your application. Please include your student number on your application. Selection will be based on the strongest demonstrated interest measured by; work experience; volunteer experience and/or projects. Students may only receive this award once.

Donor(s): Doug Broadfoot
Qualification(s): Students registered in any program in OAC who have completed a minimum of 10.0 credits at the time of application and who demonstrate an interest in poultry science.

Amount: 1 award of $500

Douglas M. Robinson Memorial Scholarship for Excellence in Communications [I0409]
Established in memory of Douglas Robinson, OAC ’53. Doug spent his career promoting and creating awareness of agriculture. This scholarship recognizes his leadership in agriculture communications and his service to both the University and agriculture communities. Apply with a resume to the OAC Awards Committee (oacaward@uoguelph.ca) by May 15. Selection will be based on demonstrated leadership promoting and creating awareness of agriculture through extracurricular activity including student competitions, university clubs, events and student government.

Donor(s): Mrs Marilyn Robinson Murray
Qualification(s): Students registered in any degree program offered by the Ontario Agriculture College with a minimum of 10.0 credits.

Amount: 1 award of $1,000
Dr. Caesar V. Senoff Memorial Scholarship for Excellence in Chemistry [I0517]
The Senoff family and the College of Engineering and Physical Sciences, together with the University of Guelph Faculty Association and friends, have established this scholarship in memory of Dr. Caesar V. Senoff. Dr. Senoff discovered the first dinitrogen complex while completing his PhD at the University of Toronto, opening up a new field of chemistry. A valued member of the University of Guelph faculty from 1968 to 1996, his positive influence continues through his students and colleagues. This scholarship will be given annually to the student with the highest cumulative average. Application is not required.

Donor(s): Senoff family and the College of Engineering and Physical Sciences, together with the University of Guelph Faculty Association and friends
Qualification(s): Students registered in a major offered by the Department of Chemistry who have completed between 7.5 and 9.75 credits and a minimum cumulative average of 80%.
Amount: 1 award of $500

Dr. James (Jim) Atkinson Scholarship [I1025]
This award has been created through the generous contributions of many alumni and friends to recognize Dr. James (Jim) Atkinson’s influence at Guelph. As coach for over thirty years on both the men’s and women’s teams, as well as a respected faculty in the department of Animal and Poultry Science, Jim has had an impact on and off the field. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

Donor(s): Alumni and Friends of Dr. James (Jim) Atkinson
Qualification(s): One male rugby player and one female rugby player who is registered in any undergraduate program and who has achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student enrolled in the Ontario Agricultural College.
Amount: 2 awards of $1,000

Dr. R. J. Hilton Memorial Scholarship [I0678]
Established to honour the accomplishments of Dr. Hilton as the Chair, Horticulture Science, University of Guelph, first Director of the Arboretum and President/Chair of the Royal Botanical Gardens. Selection will be based on the highest cumulative average, demonstrated involvement in horticulture activities and involvement in academic club activities. Summer related work experience will also be considered. Preference will be given to students registered in B.Sc.(Agr.) CHATS and B.Sc. Plant Science. Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter outlining the plant agriculture course(s) and/or involvement in horticultural activities and summer related work experience or information about involvement in academic club activities. Please include our name, student ID number and the name of the award on your application.

Donor(s): Robert E. Hilton
Qualification(s): Students registered in any program offered by O.A.C. who have completed a minimum 8.0 credits with a minimum 70% cumulative average.
Amount: 1 award of $1,000

Dr. Ralph and Joanne Watt Scholarship [I1080]
Apply to the OAC Awards Committee (oacaward@uoguelph.ca) by May 15 with a resume and a letter (no more than two page) outlining your career interests and your employment and/or extracurricular activities that demonstrate your interest in becoming an equine veterinarian and your involvement in agricultural activities. Please include the Award Name and ID in the subject line of your email and on all pieces of your application. Please also include your student ID on your application.

Donor(s): Sandy Watt
Qualification(s): Students registered in the Bachelor of Science in Agriculture with a major in Animal Science, or Honours Agriculture; the Bachelor of Science with a major in Animal Biology; or the Bachelor of Bio-Resource Management with a major in Equine Management who have completed a minimum of 8.0 credits who aspire to become an equine veterinarian are eligible. Selection will be based on highest cumulative average. Preference will be given to students who aspire to becoming an equine veterinarian and who actively participate in agricultural activities.
Amount: 1 award of $1,000

E.B. MacNaughton Convocation Prize [C0171]
Established by the College of Engineering and Physical Sciences to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application is not required. Students who have graduated from a degree program offered by the College of Engineering & Physical Sciences in the previous fall or winter semesters or will graduate in the upcoming summer semester.

Donor(s): The College of Engineering and Physical Sciences
Qualification(s): The College of Engineering and Physical Sciences nominee for the Winegard Medal.
Amount: 1 award of $1,000

Emmanuel & Kalliopi Salamalekis Scholarship [I0987]
Dr. Tony Vannelli, Dean of the College of Physical & Engineering Science from 2007 to 2016, and his wife, Voula, established this award in honour of Voula’s parents, Emmanuel & Kalliopi Salamalekis. Selection will be based on high cumulative average and demonstrated engagement in the community, preferably in a leadership role supported by two letters of reference from individuals who or organizations that have knowledge of and can attest to that experience. Apply to the College of Physical & Engineering Science Awards Committee with a letter of application and two supporting reference letters from individuals or organizations attesting to community engagement experience by May 15th. This award is not tenable with the Michele & Maria Vannelli Scholarship (I0988).

Donor(s): Dr. Anthony Vannelli and Voula Vannelli
Qualification(s): Students registered in any program offered by the College of Physical & Engineering Science who have completed a minimum of 5.0 credits and have demonstrated engagement in the community, preferably in a leadership role.
Amount: 1 award of $1,000

Floyd Roadhouse Prize in Analytical Chemistry [I0247]
Awarded to the student with the highest grade in CHEM*2400 Analytical Chemistry I in the previous calendar year. In the event of a tie, laboratory performance will be considered. Presented in the Winter semester. Application is not required.

Donor(s): Professor F.E.B. Roadhouse, colleagues, students and friends
Qualification(s): Students registered in an honours major program offered by the Department of Chemistry and who have completed CHEM*2400, Analytical Chemistry.
Amount: 1 award of $500

Frances M. Stretton Scholarship [I0768]
Selection will be based on significant prior contributions to and experience in community-based service. Preference will be given to students working on a project related to nutrition, food safety or sustainability within the College. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

Donor(s): Mrs. Frances M. Stretton
Qualification(s): Students registered full-time in any program offered by the College of Social and Applied Human Sciences with a minimum of 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the following academic year.
Amount: 1 award of $5,000
George A. Gray O.A.C.’51 Varsity Scholarships [I0487]
Established in memory of George Gray, O.A.C. ’51, a Guelph football lineman and a great player of the game. Recipients will be selected based on demonstrated athletic and leadership qualities. Coaches will nominate students to the Athletics Awards Committee. Preference will be given to members of the varsity football team. Application is not required. Awarded in the fall semester.

Donor(s): Mrs. George A. Gray
Qualification(s): In-course student-athlete who is a current member of a varsity team and has achieved a minimum 70% average in the previous academic year.
Amount: 2 awards of $1,250

Glenn Webb Education Scholarship/ GROWMARK Foundation OAC - Guelph Campus [I0897]
Apply by May 15 to the OAC Awards Office with a letter of no more than two pages outlining leadership and involvement in extracurricular activities, community service or agricultural employment, farming background and career aspirations. Preference will be given to students with an Ontario farm background and are interested in pursuing full-time employment in agriculture in the province of Ontario after graduation. Selection will be made on leadership and involvement in the field of agriculture through extracurricular activities, part-time work, and/or volunteer work are eligible.

Donor(s): Growmark, Inc.
Qualification(s): Students with a minimum cumulative average of 70% who have completed 10.0 credits of any OAC degree program.
Amount: 2 awards of $1,000

Gonder Family Scholarship [I0580]
Established in recognition of the diversity of student abilities and the varying challenges of undergraduate study. The recipient will be chosen on the basis of academic achievement with a preference to students enrolled in any LANG major of the B.Comm. program. Application is not required.

Donor(s): Dr. John and Mrs. Katherine Gonder
Qualification(s): All students in the LANG who have completed between 10.0 and 15.0 course credits with a minimum 70% cumulative average, and who have been identified with a learning disability through the University of Guelph’s Student Accessibility Services.
Amount: 1 award of $750

Gonder Family Student Accessibility Services Volunteer Scholarship [I0563]
In recognition of the many students who volunteer their time and talents to assist their colleagues registered with the Student Accessibility Services (SAS) and to encourage others to do so, Dr. John and Mrs. Katherine Gonder provide this award to a student who has volunteered in the SAS. The award will be made on the basis of the volunteer activities undertaken by the student at the SAS, one letter of reference, and a personal statement that outlines the time commitment and types of volunteer activities undertaken as well as an indication of how this was a valuable and rewarding volunteer experience. Apply by January 15th to the SAS (c/o Advisor to Students with Disabilities) by submitting above documentation.

Donor(s): Dr. John and Mrs. Katherine Gonder
Qualification(s): All students registered in the College of Social and Applied Human Sciences (CSAHS) that have completed between 10.0 and 15.0 course credits with a minimum 70% cumulative average, and have been involved as volunteers with the SAS.
Amount: 1 award of $750

Gordon Food Service Active Lifestyle Scholarships [I1104]
Gordon Food Service is the largest privately held, family managed food service company in North America, focused on establishing business alliances for over 120 years. Gordon Food Service is committed to the future of their company, which begins with exceptional people like you! Students apply by May 15th to the LANG awards committee with a 1-page letter describing the length and depth of their physically active lifestyle and experience or interest in logistics and/or operations. Hiking, biking, skiing, sledging, hockey, running, lifting weights, rock climbing and intramural sports are examples (but not exclusive to) of an active lifestyle. The recipients will be selected from a pool of applicants having met the criteria based on the highest grade in FARE 3310 “Operations Management,” or HTM 3120 “Service Operation Analysis.” In the event of a tie, the student with the highest cumulative average will be selected.

Donor(s): Gordon Food Service
Qualification(s): Students registered in any major offered by the Gordon S. Lang School of Business and Economics, who live a physically active lifestyle, completed FARE*3310 “Operations Management,” or HTM*3120 “Service Operation Analysis”, have experience or interest in operations and/or logistics, and have a minimum of 70% cumulative average.
Amount: 2 awards of $2,500

Governor General’s Medal [C0044]
Established by the Office of the Governor General of Canada. Application is not required.

Donor(s): The Chancellery
Qualification(s): Restricted to those undergraduate students in any degree program who are graduating in June, or who have graduated in the previous two convocations, with the highest cumulative average.
Amount: 2 awards of a Silver medal each

Grace Olivia Glofcheskie Memorial Scholarship [I0977]
Established in loving memory of Grace Olivia Glofcheskie (BSc ’13, MSc ’15) and supported by family, friends and peers to honour Grace’s time at U of G. Selection will be based on highest cumulative average. No application required.

Donor(s): Friends and Family of the Glofcheskies
Qualification(s): Students registered in CBS who have a minimum of 5.0 credits and who are varsity athletes. Preference will be given to students registered in Human Health & Nutritional Sciences.
Amount: 1 award of $2,000

Guelph Soap Company Scholarship [I0288]
Established by the Guelph Soap Company and awarded to the student with the highest average in BI0C*2580 and two courses in Organic Chemistry (CHEM*3750, 3750, 3760, 4720, 4730). Application is not required.

Donor(s): Tricorp Chemical Specialties
Qualification(s): Students registered in a major offered by the Department of Chemistry who have completed CHEM*3750 or CHEM*3760 during the previous calendar year and completed BI0C*2580.
Amount: 1 award of $1,200

H. Paul Jolly Scholarship [I0193]
Application is not required.

Donor(s): Richard Sulin
Qualification(s): Student with the highest cumulative average entering semester 3 of the B.Sc.(Env.) program.
Amount: 1 award of $450

Harry Barrett Memorial Scholarship [I1046]
This award was established through a gift from the estate of Mr. Harry Barrett, a graduate of OAC from 1949. Selection will be based on the highest cumulative average. Apply by May 15th to Student Finance with a written explanation of the planned experiential learning opportunity. If there are no applications by May 15th, the scholarship will be given to the student with the highest grade in ZOO*4920 in the previous Fall offering.

Donor(s): The Estate of Harry Barrett
Qualification(s): Students registered in any program who will be participating in field work related to bird studies. Preference will be given to students interested in research and/or study under the Bird Studies Canada program at their headquarters in Port Rowan, Ontario.
Amount: 1 award of $1,500

Highdale Farms Scholarship [I0348]
Established by Mr. Arthur Spoerri, who has had a professional career as an Economist. The student with the highest program average will be selected for one award and the second recipient will have the highest cumulative average from the listed counties. In the event the student with the highest grade average is also from the listed counties, the student with the second highest average will be selected. A student cannot hold two Highland Farm Scholarships at the same time. Application is not required.

Donor(s): Arthur Spoerri
Qualification(s): Students registered in a program offered by the College of Engineering & Physical Sciences, excluding the Bachelor of Engineering program, who have completed minimum of 4.0 credits but no more than 16.0 credits and achieved at minimum 75% cumulative average. Preference given to students from Ottawa-Carleton, Dundas-Glengarry-Stormont, Grenville, Lanark, Prescott-Russell and Renfrew counties.
Amount: 2 awards of $5,000

Last Revision: July 4, 2019
2019-2020 Undergraduate Calendar
International Undergraduate Scholarship [I0577]
Established through a student referendum approved by the undergraduate student body, to recognize international students' academic merit along with involvement/leadership activities during their enrollment at the University of Guelph. Apply to Student Financial Services, by May 15, with a letter indicating involvement/extra-curricular activity since entry to the University. This award can only be held once by the student.

**Donor(s):** International Student Organization (ISO)

Qualification(s): Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.

**Amount:** several at awards of $3,000

Jack and Lillian MacDonald Scholarship [E00379]
Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.

**Donor(s):** Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald

Qualification(s): Entering students coming from the Six Nations Polytechnic (SNP).

**Amount:** 1 award of $900

James M. Dougan Ecology Scholarship [I0943]
Apply by May 15 to the OAC awards committee, oacaward@uoguelph.ca, with a single page letter outlining extra-curricular activities related to environmental issues and indicate number of contributed hours over the last 12 months (June to May). Selection will be based on the greatest number of participatory hours in environmental related extra-curricular activities over the last 12 months (May to June).

**Donor(s):** Mr. James M. Dougan

Qualification(s): Students registered in the Environmental Science or Ecology Majors in the B.Sc. Env. program or the Biodiversity or Environmental Biology Major of the B.Sc. program who have completed a minimum of 15.0 credits, have a minimum cumulative average of 75% and participation in environmental related extra-curricular activities.

**Amount:** 1 award of $1,000

Jane Collins Scholarship [I0869]
Selection will be based on demonstrated significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities. Preference will be given to students engaged in community-based or community-focused projects addressing any social, political, legal, economic or health-related aspect of poverty or its prevention. The project must be a part of a course of study rather than volunteer activity. Apply to the CSAHS Awards Committee by May 15 with a summary letter outlining prior significant contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities.

**Donor(s):** Mrs. Jane L. Collins, MAC BHSc 1955

Qualification(s): Students registered in any program offered by the College of Social and Applied Human Sciences who have completed 5.0 credits and will be participating in curriculum-embedded community-based experiential learning as part of a course of study in the following year.

**Amount:** 1 award of $1,000

Janet Wardlaw Memorial Scholarship [I0937]
Established in memory of Janet Wardlaw, the first Dean of Family and Consumer Studies (FACS). In odd numbered years, this scholarship recognizes a student registered in the Gordon S. Lang School of Business and Economics (LANG). In even numbered years, this scholarship recognizes a student registered in the College of Social and Applied Human Sciences (CSAHS). Additional preference will be given to students with experiential learning involving international travel. Apply by May 15th. In odd-numbered years, applications can be submitted to the Gordon S. Lang School of Business and Economics Awards Committee (lang.awards@uoguelph.ca). In even numbered years applications can be submitted to the College of Social and Applied Human Sciences Awards Committee. Include a one page letter outlining community-based service or extracurricular involvement demonstrating leadership skills and volunteerism. In addition, indicate if experiential learning opportunities involved international travel.

**Donor(s):** Class of FACS 1974

Qualification(s): Students registered in any program offered by LANG or CSAHS with a minimum cumulative average of 75% who have completed or are currently enrolled in curriculum-embedded experiential learning who demonstrates significant volunteer contribution to community-based service or extracurricular involvement.

**Amount:** 1 award of $1,000

Jim Stokman Memorial Scholarship [I0386]
Mrs. Stokman and family, including her sons Nick (O.A.C. ’77) and Andrew (O.A.C. ’84) have established this award in memory of her husband and their father to recognize his lifetime contribution to the family farm. Apply by May 15th to the OAC Awards Office with a letter that indicates rural background and demonstrated community/student involvement both during high school and the first two semesters of University.

**Donor(s):** Mrs. Jim Stokman

Qualification(s): Available to O.A.C. students who have completed 5.0 credits with at least ‘B’ average in one of the following programs: B.Sc. (Agr.), B.Comm., B.Sc. or B.Sc. (Env.). Students must have come from a rural background and have demonstrated community/student involvement both during high school and the first two semesters of University.

**Amount:** 1 award of $500

John Burton Scholarship [I0642]
Established by Dr. John Burton, BSA 1962, a former faculty member in the Department of Animal Biosciences. Selection will be based on involvement with and contribution to the horse industry, future career aspirations in the horse industry sector and participation in community activities. Preference will be given to student who has demonstrated leadership ability within the student body. Apply by May 15 to the OAC Awards Office with a letter of no more than two-pages, outlining involvement with and contributions to the horse industry, career aspirations, and extracurricular involvements. Awarded in the fall semester.

**Donor(s):** Dr. John Burton

Qualification(s): Students registered in any program offered by the OAC who have completed between 10.0 and 12.0 credits with a minimum 70% average

**Amount:** 1 award of $1,000

John Eccles Scholarship [I0093]
Apply to Student Financial Services, by May 15, with a letter highlighting leadership abilities through participation on residence life. Providing a reference letter would be an asset.

**Donor(s):** Student Housing Services

Qualification(s): Full-time student registered in semester 2, 3, 4, 5 or 6 and living in residence in the Winter semester who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in residence related activities. Residence Life Staff and paid members of Interhall Council and Hall Councils are not eligible.

**Amount:** 1 award of $1,000

John Kenneth Galbraith Scholarship in Economics [I0108]
Selection will be based on the highest combined average in Economics (ECON) courses. No application necessary.

**Donor(s):** The Board of Governors, University of Guelph

Qualification(s): Students registered in any major offered by the Department of Economics who have completed between 12.50 and 15.00 credits.

**Amount:** 1 award of $600
IX. Scholarships and Other Awards, Bachelor of Science in Environmental Sciences

**Johnson & Johnson Diversity and Inclusion Scholarship in Science [11107]**

Apply by May 15th to the office of the Associate Dean Academic in the College of Biological Science with two supporting reference letters. Selection will be based on greatest demonstrated leadership to increase advocacy for diversity and inclusion in the community. Students who are graduating in June, or who have graduated in the previous two convocations from the Gordon S. Lang School of Business and Economics. Application not necessary.

**Qualification(s):** Students registered in any program offered by the College of Biological Science or the College of Engineering and Physical Sciences with a minimum cumulative average of 75% who have completed 4.0 credits and who have demonstrated leadership to increase advocacy for diversity and inclusion in the community. Preference will be given to leadership in the Guelph community.

**Amount:** 1 award of $1,000

**Donor(s):** Johnson & Johnson

---

**Johnson Entrepreneurship Scholarship [11077]**

Chris Johnson (BComm '97) is the founder and CEO of Crown Capital Partners. He discovered his inner entrepreneur after graduating from U of G and wants to encourage business students to consider entrepreneurship as a potential career choice. Chris believes that entrepreneurship and innovation is critical for the Canadian economy to prosper.

Students are encouraged to apply to the LANG Dean’s Office, or to lang.awards@uoguelph.ca, by May 15th with a letter indicating their entrepreneurial spirit, how they will further foster this spirit (through knowledge and skills acquisition) through projects in their final year of study, and how receiving this scholarship will aid the student in their contributions to Canada’s knowledge-based society, while fostering innovation within it. Selection will be based on the degree of originality and innovation of the applicant’s business ideas and propositions described in the letter.

**Qualification(s):** Students registered in any program offered by the Gordon S. Lang School of Business and Economics who have completed a minimum of 15.0 credits.

**Amount:** 1 award of $10,000 (payable over two semesters - $5,000 in each of the fall and winter semesters)

**Donor(s):** Chris Johnson

---

**Ken and Marilyn Murray Scholarship [10734]**

Dr. Kenneth G. Murray C.M., OAC BSA ’50 and Honourary Doctor of Laws ’96, and Mrs. Marilyn C. Murray, Mac BHSc ’55, established this scholarship. Selection will be based on significant prior contributions to and experience in community-based service. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

**Qualification(s):** Full-time students registered in the College of Social and Applied Human Sciences with a minimum 75% cumulative average who are participating in curriculum-embedded community-based experiential learning in the province of Ontario in the following academic year will be eligible for this award.

**Amount:** 1 award of $2,000

**Donor(s):** Dr. Kenneth G. and Mrs. Marilyn C. Murray

---

**Kenneth W. Hammond Scholarship [10045]**

Student with the highest grade in the course ENVS*2070 “Environmental Perspectives and Human Choices.” Application is not required.

**Qualification(s):** Students who have completed the course Environmental Perspectives and Human Choices ENVS*2070

**Amount:** 1 award of $1,000

**Donor(s):** Kenneth W. Hammond

---

**Kevin Durie Memorial Scholarship [10653]**

Established in memory of Kevin Durie, BA ’93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.

**Qualification(s):** Students who are registered in any degree program on the University of Guelph campus, are a member of Residence Life staff and are academically eligible to continue as a Residence Assistant or as part of Residence Life staff.

**Amount:** 2 awards of $1,000

**Donor(s):** Christine Blake-Durie

---

**Kip Hunter Prize [10139]**

For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May 1

**Qualification(s):** Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.

**Amount:** 1 Book prize

---

**Lambda Foundation Scholarship in LBGT Studies [10591]**

This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LBGT peoples. Preference will be given to an applicant who is involved in the LBGT community as demonstrated by a record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a given student only once. Projects must have been completed or research proposals accepted within the past calendar year. Apply to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referencing involvement in the LBGT community and/or faculty support.

**Qualification(s):** Students enrolled in a program with a thesis, a research essay, independent research project or course work programs pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.

**Amount:** 1 award of $1,000

---

**LANG Distinguished Scholar Medal – Undergraduate (Winegard Medal Nominee) [C0685]**

To honour the outstanding achievements of a graduating undergraduate student in the Gordon S. Lang School of Business and Economics. Application not necessary.

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations from the Gordon S. Lang School of Business and Economics

**Amount:** 1 Medal

---

**LANG Distinguished Scholar Medal- Undergraduate (Highest Cumulative Average) [C0728]**

This medal is presented to the student with the highest overall cumulative average. No application necessary.

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations from the Gordon S. Lang School of Business and Economics

**Amount:** 1 of a Medal

---

**LANG-SA Student Leader Scholarship [10895]**

Volunteer activities may include but are not limited to holding a council position on LANG-SA executive or management teams, Board of Directors, Student Senator, Accredited Student Organizations (ASO) or a LANG affiliate club. Selection will be based on contributions to college-related activities. Apply to the LANG Awards Committee (lang.awards@uoguelph.ca) by May 15 with a resume and a one page letter outlining volunteer/leadership experience within the college.

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations from the Gordon S. Lang School of Business and Economics

**Amount:** 1 award of $1,000

---

**Lange and Prokipcak Chemistry Scholarship [10528]**

This scholarship was established by Professor Gordon L. Lange, Professor Joe M. Prokipcak, friends and colleagues. Professors Gordon L. Lange and Joe M. Prokipcak were valued members of the chemistry Faculty who retired in 2001. Their excellence in teaching was recognized within the university and nationwide, winning them a total of eleven teaching awards. This scholarship will be awarded to the student with the highest average grade in CHEM*1040, 1050 and 2700. Application is not required.

**Qualification(s):** Students registered in any program offered by the Gordon S. Lang School of Business and Economics who have completed a minimum of 4.0 credits and can demonstrate involvement in college-related volunteer/leadership activities.

**Amount:** 1 award of $1,000

---

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
Leonard Conolly Exchange Student Scholarship [I0446]
Established by students, faculty and staff to honour Prof. Leonard Conolly, professor of drama, Chair of the Department of Drama, 1981-88, and Associate Vice-President Academic, 1988-1992. Apply to the Centre for International Programs by April 5, for visiting during the subsequent Fall or Winter semesters. Selection, by the Centre for International Programs, will be based on assessment of (a) a one-page submission describing the significance of the student visiting Guelph to the program at the partner university (b) two faculty references of one-page each, and (c) consistent high performance in the course work completed, as documented by a transcript of program grades to date, submitted by the home university.

**Donor(s):** Students, staff, faculty and friends of Dr. Leonard Connolly

**Qualification(s):** Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries and exchange partner universities is available in the Centre for International Programs).

**Amount:** 1 award of $1,000

Linda S. Allen Memorial Graduation Prize [C0914]
This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medallion, on the occasion of its second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant circumstances during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).

**Donor(s):** Brian Allen, Family, Friends and Colleagues of Linda S. Allen

**Qualification(s):** Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.

**Amount:** 1 award of $1,000

Lorena Karli Sears Scholarship [I0968]
Professor Mark Sears, a retired Entomologist from the School of Environmental Sciences, established this scholarship in memory of his grandmother, Lorena Karli Sears who was a resourceful farm girl from the U.S., with an interest in the environment. Students will be selected by: 1.Clearly designed plan for research; 2. Student’s research potential as described by an academic reference letter from an instructor; and 3. Cumulative GPA. Apply to the OAC Awards Committee by May 15 with a statement describing your interest in research (maximum 500 words) and brief reference letter from a faculty member describing your research potential. To submit your statement, please email it as an attachment to oacaward@uoguelph.ca. Please include the title of the award and the award ID number in the subject line of your email and on your application. Please also include your student ID number on your application. Faculty members can email their reference letter to oacaward@uoguelph.ca.

**Donor(s):** Mark Sears

**Qualification(s):** OAC students who are registered in the B.Sc. (Env.), B.Sc. with a major in Environmental Biology, or the Bachelor of Bio-Resource Management with a major in Environmental Biology. Students who have completed a minimum of 12.0 credits and are registered in one of ENVS*410, ENVS*450, ENVS*4001/2 or another research course /Independent Study course.

**Amount:** 1 award of $2,500

Mac 1971 Keith and Rosalind Slater Tribute Scholarship [I0830]
Established in recognition of Dr. Keith Slater, Honourary Class President for Mac ’71, and Rosalind Slater. Selection will be based on leadership ability as demonstrated through extracurricular involvement, and/or dedication to volunteerism and community-based service in any of the following areas: family relations, applied nutrition, theatre arts, environment sciences, or children’s literacy. Apply to the CSAHS Awards Committee by May 15th with a resume and a one page summary letter outlining extracurricular involvement, leadership experience, volunteerism and community-based service, as well as how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year. The award can only be held once.

**Donor(s):** Class of Mac 1971

**Qualification(s):** Full-time student registered in any major within the College of Social and Applied Human Sciences who has completed a minimum of 8.0 credits with a cumulative minimum average of 75% and is participating in curriculum-embedded community-based experiential learning in the following academic year.

**Amount:** 1 award of $1,000

MAC 67 50th Anniversary Scholarship [I0190]
Established by the Class of MAC 1967 in recognition of their 50th anniversary, this award recognizes students registered in any program offered by the College of Social and Applied Human Sciences who demonstrate a commitment to the well-being of families and individuals through volunteering or experiential learning. Apply to the CSAHS Awards Committee by May 15th with a one-page letter outlining volunteer and experiential learning and a reference letter demonstrating commitment to the well-being of families and individuals.

**Donor(s):** The Class of MAC 1967

**Qualification(s):** Preference will be given to students in the Department of Family Relations and Applied Nutrition. If all else considered equal, this award will go to the student with the highest cumulative average.

**Amount:** 1 award of $1,500

Macdonald Stewart Scholarship in Memory of Walter and May Stewart [I0813]
Selection will be based on significant prior contributions to and experience in community-based service and future participation in curriculum-embedded experiential learning opportunities in the following academic year. Preference will be given to those studying in the areas of applied nutrition, sustainable food systems or environmental governance. Apply to the CSAHS Awards Committee by May 15th with a summary letter outlining prior contributions to and experience in community-based service, and how funds would be used to support participation in curriculum-embedded experiential learning opportunities in the following academic year.

**Donor(s):** The Macdonald Stewart Foundation

**Qualification(s):** Students registered in any program offered by the College of Social and Applied Human Sciences who are participating in curriculum-embedded experiential learning in the following academic year.

**Amount:** 1 award of $3,500

Mae McEwen Memorial Scholarship [I0185]
Apply to the OAC Awards office by May 15 with a letter outlining extra curricular activities related to environmental issues.

**Donor(s):** The estate of Mae McEwen

**Qualification(s):** Student who has completed semester 6 of the Environmental Biology major in the B.Sc. or B.Sc (Env.) programs with a cumulative average of 80% or better. Participation in extra curricular activities related to environmental issues will be considered in determining the recipient.

**Amount:** 1 award of $500

Marion McKenzie Scholarships for Outstanding Achievement in History [I0470]
These prizes have been established in memory of Marion McKenzie (1905-1994), a teacher who had a love of learning and a continuing curiosity about the world both past and present. These are awarded to the top student in each of the required core courses in the History program (HIST*1050, HIST*2450) in the previous academic year. Application is not required.

**Donor(s):** Dr. James Snell and Mrs. Leslie Snell

**Qualification(s):** Students who have completed one of the following required core courses in History: HIST*1050 and HIST*2450. The recipient for HIST*1050 must have completed no more than 5.0 credits; the recipient for HIST*2450, no more than 10.0 credits and be in the specialization in History.

**Amount:** 2 awards of $1,000
McNeil Consumer Healthcare Diversity and Inclusion Scholarship in Science [10947]

Established to acknowledge students who demonstrate leadership by increasing advocacy for diversity and inclusion in the community. Selection will be based on greatest demonstrated leadership to increase advocacy for diversity and inclusion in the community through positions held, extracurricular activities and involvement on campus and in the community as evidenced by two letters of reference. Leadership that increases advocacy for inclusion; creating an environment that is safe, positive, respectful and diverse; recognizes and celebrates the range of social identity groups that comprise the community. Apply by May 15th to the CBS, Associate Dean Academic Office (cbsada@uoguelph.ca) with two letters of reference. Preference will be given to leadership in the Guelphh community. Students may hold this award only once.

**Donor(s):** McNeil Consumer Healthcare

**Qualification(s):** Students registered in any program offered by the College of Biological Sciences or the College of Engineering and Physical Sciences with a minimum cumulative average of 80% who have completed 4.0 credits and who have demonstrated leadership to increase advocacy for diversity and inclusion in the community.

**Amount:** 1 award of $4,000

Michele and Maria Vannelli Scholarship [10988]

Dr. Tony Vannelli, Dean of the College of Physical & Engineering Science from 2007 to 2016, and his wife, Voula, established this award in honour of Dr. Vannelli’s parents, Michele and Maria Vannelli. Selection will be based on high cumulative average and demonstrated engagement in the community, preferably in a leadership role supported by two letters of reference from individuals who or organizations that have knowledge of and can attest to that experience. Apply to the College of Physical & Engineering Science Awards Committee with a letter of application and two supporting reference letters from individuals or organizations attesting to community engagement experience by May 15th. This award is not tenable with the Emmanuel & Kalliople Salamalekis Scholarship (I0987).

**Donor(s):** Dr. Anthony Vannelli and Voula Vannelli

**Qualification(s):** Students registered in any program offered by the College of Physical & Engineering Science who have completed a minimum of 5.0 credits and have demonstrated engagement in the community, preferably in a leadership role.

**Amount:** 1 award of $1,000

Monroe Landon Memorial Scholarship [10153]

Preference will be given to students from the counties of Norfolk or Haldimand as evidenced in letter of application. Selection will be based on the student who has demonstrated the most active interest in field biology and conservation of native flora. Apply by May 15 to the main office, Integrative Biology (SCIE Room 2481) with a one-page letter of application, one letter of support and a resume that outlines volunteer and work experiences in field biology and conservation of native flora.

**Donor(s):** Norfolk Field Naturalists and family of Monroe Landon

**Qualification(s):** Students registered in any program offered by the Department of Integrative Biology who have completed between 14.5 and 17.5 credits with a minimum 75% cumulative average and who have demonstrated an active interest in field biology and conservation of native flora.

**Amount:** 1 award of $2,000

Nathan Max Goldman Choir Scholarships [10774]

Established in honour of Mr. Goldman, an O.A.C. graduate (1945 and 1947) and former President of the Philharmonia Society at the University of Guelph. The scholarships will support two students who demonstrate outstanding leadership and vision in the Symphonic Choir and/or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high vocal achievement and choral leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required as a recommendation by Choir Director will be made to the SOFAM Awards Committee.

**Donor(s):** Mrs. Anne Goldman and the family of Nathan Max Goldman

**Qualification(s):** Students registered in any degree program who are currently a member of the University of Guelph Symphonic Choir and/or the Chamber Choir and have been a member of the University of Guelph Choirs for at least two years.

**Amount:** 2 awards of $1,000

Natural Resource Solutions Prize in Field Ecology [11058]

Natural Resource Solutions Inc. established this award to acknowledge students demonstrating academic excellence in the area of field work in ecology. Selection is based on the highest grade in the course. This scholarship cannot be held at the same time as Natural Resource Solutions Scholarship in Laboratory and Field Work in Ecology I1057. Application is not required.

**Donor(s):** Natural Resource Solutions Inc.

**Qualification(s):** Students who completed Field Ecology in the previous fall semester BIOL*4410

**Amount:** 1 award of $1,000

Natural Resource Solutions Scholarship in Laboratory and Field Work in Ecology [11057]

Natural Resource Solutions Inc. established this award to acknowledge students demonstrating academic excellence in the area of field work in ecology. Selection is based on the highest grade in the course. This scholarship cannot be held at the same time as Natural Resource Solutions Prize in Field Ecology I1058. Application is not required.

**Donor(s):** Natural Resource Solutions Inc.

**Qualification(s):** Students who completed (in the previous Fall semester) Laboratory and Field Work in Ecology BIOL*3010

**Amount:** 1 award of $1,000

Nick Westwood Memorial Scholarship in Spectroscopy [10982]

In recognition of Professor Nick Westwood’s enduring contributions to the field of Molecular Spectroscopy, and his devotion to academic development and achievement at all levels, his family, friends and Department of Chemistry colleagues have established this award to honour his memory. Selection will be based on the highest grade in CHEM*2070 Structure and Spectroscopy. In the event of a tie, the award will go to the student with the highest cumulative average. Application not required.

**Donor(s):** Staff, faculty and friends of the Department of Chemistry

**Qualification(s):** Students registered in any degree program with a minimum 80% cumulative average who have obtained a minimum of 80% in CHEM*2070 Structure and Spectroscopy.

**Amount:** 1 award of $1,000

O.A.C. ‘55 Scholarships [10064]

Provided by the class of O.A.C. ‘55. Recipients will have made an outstanding contribution to College life through academic proficiency and participation in extracurricular activities and can be considered to have done the most for the College, for fellow students and in their personal development. Apply by May 15 to the OAC Dean’s Office (Awards) with a letter outlining your participation in Class/College/University activities. Awarded in the fall semester.

**Donor(s):** O.A.C. ’55

**Qualification(s):** Students registered in any O.A.C. degree program or students registered in the B.ENG. program that have completed a minimum of 10.0 with at least a 70% cumulative average.

**Amount:** 1 award of $1,500

O.A.C. Centennial Graduate Prizes [C0209]

The Ontario Agricultural College celebrated its 100th Anniversary in 1974. Many organizations and companies associated with the agricultural industry provided funds in conjunction with the Centennial activities. Funds have been established in perpetuity as a permanent commemoration of the Centennial of the College. Apply to OAC Awards Office by April 1 with a letter outlining extracurricular activities. Selection will be based on academic achievement in semesters 7 and 8, as well as participation in extracurricular activities throughout the student's university career.

**Donor(s):** Dean, O.A.C.

**Qualification(s):** Students graduating from a degree program administered by the Ontario Agricultural College and who plan to pursue graduate studies in any department or school of the Ontario Agricultural College in the year of baccalaureate graduation. The fellowship will be based on academic achievement in semesters 7 and 8, as well as participation in extracurricular activities throughout the student's university career.

**Amount:** 1 award of $2,200

O.A.C. Students’ Federation Medal [C0217]

Application is not required.

**Donor(s):** O.A.C.

**Qualification(s):** Graduating student in an undergraduate degree program in a major in an O.A.C. department who has been an outstanding leader in student activities at the College level throughout his or her University career.

**Amount:** 1 award of a Medal
### OAC ‘45 Public Speaking Scholarship [10200]

Offered by the Class of ’45 O.A.C., on the occasion of their 40th anniversary. Apply with a one page letter summarizing public speaking experience to the OAC Awards Office by May 15. Selection will be based on demonstrated excellence and effort in public speaking within or outside of the University of Guelph (i.e. TEDx, Toastmasters, 4-H, community events).

**Donor(s):** Mr. Aubrey Hagar  
**Qualification(s):** Students who have completed a minimum of 15.0 credits in any program offered by OAC.  
**Amount:** 1 award of $1,500

### Parrish and Heimbecker Scholarship (formerly known as Heimbecker Scholarship in Entrepreneurship) [10388]

Parrish and Heimbecker. Limited is a private, family owned business, founded in 1909 involved in many aspects of agri-business across Canada. This scholarship was established to honour Herb Heimbecker's service and contribution to the agri-food industry in Canada. Apply by May 15 to the OAC Awards Committee at oacaward@uoguelph.ca with a resume demonstrating the students’ level of involvement with the agricultural and food industry. Please include the name of the award and the Award ID number in the subject line of your email and on your application. Please also include your student ID number on your application. Selection will be based on demonstrated commitment to the agricultural and food industry measured by the approximate number of hours a student has dedicated per week to work and/or extracurricular and/or volunteer activities related to the agricultural and food industry during their Undergraduate degree.

**Donor(s):** Friends and Associates of Herb Heimbecker  
**Qualification(s):** Students registered in any OAC program, who have completed a minimum of 10 credits who have demonstrated their passion and commitment to the agricultural and food industry through their extracurricular and/or volunteer activities during their Undergraduate degree and who aspire to have a career in the agricultural and food industry.  
**Amount:** 1 award of $1,000

### Priscilla and Stanford Reid Trust Prize [10597]

Established in honour the first chair of the History Department, Stanford Reid, and his wife, Priscilla Reid to acknowledge the best paper written about the history of Presbyterianism and/or the Reformed tradition. Apply, by April 1, with a copy of the paper and a covering letter including contact information to the Department of History Awards Chair.

**Donor(s):** Priscilla and Stanford Reid Trust Fund  
**Qualification(s):** Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.  
**Amount:** 1 award of $500

### Professional Staff Association Scholarship [10628]

This scholarship is provided to students with the highest cumulative average. Apply to Student Financial Services by May 15 by sending an email to awards@uoguelph.ca and include the name of the family member of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. This award may be held more than once, however, not in consecutive years. Preference will be given to students of current or retired P.S.A. members. Selection will be based on highest cumulative average.

**Donor(s):** Professional Staff Association  
**Qualification(s):** Full-time students who are from the immediate family, part-time or contractual Professional/Managerial Group employees of the University, and/or retired Professional/Managerial Group of the University of Guelph who have completed at least 5.0 credits and have a minimum 70% cumulative average.  
**Amount:** 1 award of $1,500

### Project Hero Scholarship [10979]

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent's full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph  
**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.  
**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

### RB Palmer Horticultural Scholarship [11083]

These scholarships were established by RB Palmer in support of students who are interested in plant breeding, plant genetics and horticulture. RB Palmer was particularly inspired by Ornamental Horticulture, lilies and gladiolas in particular. Apply by May 15 to the OAC Awards Office (oacaward@uoguelph.ca) with a letter (no more than two pages) listing the courses you have completed that demonstrate your interest in horticulture, plant genetics or plant breeding. Selection will be based on highest cumulative average.

**Donor(s):** RB Palmer Horticultural Fund  
**Qualification(s):** Students registered in a program offered by the Ontario Agricultural College who demonstrate an interest in horticulture, plant genetics or plant breeding. Preference will be given to students who demonstrate an interest in Ornamental Horticulture.  
**Amount:** 1 award of $1,000
<table>
<thead>
<tr>
<th>Scholarship Title</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience Scholarship</td>
<td>Female students registered in any program within the School of Engineering, who have assumed roles of leadership and who have demonstrated resilience in response to personal life challenges or adversity (e.g. physical disability, financial constraints, socio-economic barriers); 2. Effective leadership, as evidenced through positions held, extracurricular activities, involvement on campus/in school and/or in the community; 3. Positive impact, on others, the Gordon S. Lang School of Business and Economics, the University of Guelph, or the broader community, as evidenced in a 500-word statement. In the event of a tie the student with the highest cumulative average will be selected. Award cannot be held more than once.</td>
<td>The Angel Gabriel Foundation</td>
<td>1 award of $5,000</td>
</tr>
<tr>
<td>Robert Harcourt Scholarships</td>
<td>Students entering year 3 having completed 14.0 credits in a program offered by the School of Environmental Sciences; Bachelor of Science in Environmental Biology; Bachelor of Science in Environmental Sciences (including: Bachelor of Science with a major in Environmental Biology with a minor in Environmental Sciences)</td>
<td>Estate of Mrs. R. Harcourt</td>
<td>2 awards of $750</td>
</tr>
<tr>
<td>RWDI Scholarship for Engineering Student Athletes</td>
<td>Current members of any Gryphon varsity team who are registered in any program offered by the School of Engineering and who have achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student-athlete who has volunteered in the community.</td>
<td>RWDI</td>
<td>1 award of $3,500</td>
</tr>
<tr>
<td>School of Environmental Sciences Academic Prize</td>
<td>Students who are graduating in June, or who have graduated in the previous two convocations, from any major in the School of Environmental Sciences, including: Bachelor of Science with a major in Environmental Biology; Bachelor of Science in Environmental Sciences with a major in Environmental Sciences; Bachelor of Bio-Resource Management with a major in Environmental Management</td>
<td>The School of Environmental Sciences</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>
Summerlee Humanitarian Scholarships [10964]
The Summerlee Humanitarian Scholarships are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues of global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a varsity athlete (varsity athletes should self-identify in their letter). While applicants who demonstrate past significant impacts in improving local communities/groups will be considered, preference will be given to applicants with strong previous proven international humanitarian efforts. Recipients must adhere to the University of Guelph’s Safe Travel Policy.

Donor(s): The Angel Gabriel Foundation
Qualification(s): Students registered in any program with no more than 17.0 credits completed who have demonstrated a commitment to humanitarian efforts including but not limited to those affecting refugees, displaced persons, and populations affected by conflict and natural disasters through volunteer positions, prior employment and/or extra-curricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.
Amount: 5 awards of $10,000 ($5,000 in each of the fall and winter semesters) plus an additional up to $4,000 to support travel costs

Susan Travers Memorial Scholarship [10975]
Established by friends, family and colleagues in Alumni Affairs and Development in Memory of Susan Travers. Susan believed in the value of education. She worked for the University of Guelph as a member of Alumni Affairs and Development and in the Department of Business. She not only encouraged her children to pursue post-secondary education, but led by example, pursuing her university degree as a mature student. Preference will be given to students registered in CSAHS and LANG. Selection will be based on highest cumulative average. No application required.

Donor(s): The staff in Alumni Affairs and Development and Friends
Qualification(s): Students who were accepted to the University of Guelph as a “mature student” applicant and who are currently registered in any degree program.
Amount: 1 award of $1,000

T.K. Warley Agrifood Policy Prize [10212]
Established by Prof. T.K. Warley, former Chair of the Department of Food Agriculture and Resource Economics and a faculty member of the Ontario Agricultural College from 1970 to 1991. Application is not required.

Donor(s): Professor T.K. Warley
Qualification(s): Student providing the best term paper written on a public policy issue relating to the agrifood system or rural society in courses such as AGEC*3030 Price and Production Analysis, AGEC*4000 Agricultural and Food Policy, and AGEC*4720 Special Study in Food Agriculture and Resource Economics.
Amount: 1 award of $500

Thomas H. Peters Scholarship [10233]
Application is not required.

Donor(s): Friends and associates of Thomas H. Peters
Qualification(s): Student in any academic program of the University who has completed courses in Land Reclamation (e.g. CROP*2280, SOIL*3200), with a minimum 10.0 credits completed. Applicants must have a minimum of 70% cumulative average and have demonstrated an interest and aptitude in the area of crops and land reclamation.
Amount: 1 award of $500

Toronto District Beekeeper’s Association Scholarship [10285]
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application is not required.

Donor(s): Mr. Jack Robinson
Qualification(s): The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.
Amount: 1 award of $500

Uffelmann Connor Family Scholarship [11007]
Selection will be based on the highest cumulative average. Students may only receive this award once. No application required.

Donor(s): Maris Uffelmann and Dean Connor
Qualification(s): Students registered in the Bachelor Science in Environmental Sciences with a major in Environmental Economics and Policy (EEP) who have completed a minimum of 10.0 credits.
Amount: 1 award of $2,000

United Steelworkers Local 4120 Scholarship [10293]
Apply to Student Financial Services by January 31 and provide the name of the USWA member and relationship to the applicant. If there is more than one eligible candidate, the award will go to the one who has attained the highest relative class standing in his or her previous full-time semester.

Donor(s): United Steelworkers LU4120
Qualification(s): Student who is a member or former member, or who is from the immediate family of a member of United Steelworkers LU 4120, and who is entering semester 2, 3, or 4 of a degree or diploma program in the Winter semester with a minimum 70% cumulative average.
Amount: 1 award of $1,000

University of Guelph Alumni Legacy Scholarship [10735]
Funded through donations made to the University of Guelph Alumni Memorial Fund in memory of deceased alumni. The recipient will be selected based on academic achievement and volunteer contributions to the University of Guelph community. Apply to Student Financial Services by May 15 with a cover letter indicating name, degree and year of graduation of alumna/alumnus relative and a resume or summary of leadership and volunteer contributions to the University of Guelph community.

Donor(s): Various donors c/o University of Guelph Alumni Association Memorial Fund
Qualification(s): Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with both a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumna/us of the University of Guelph or its founding colleges.
Amount: 1 award of $1,000

University of Guelph Retirees Association Scholarship [10859]
Established in 2007 to acknowledge in-course student achievement. The student having the highest cumulative average will be selected and in the event of a tie, the student with the highest average in the last two semesters of full-time studies will be chosen. Apply by May 15th to Student Financial Services with a letter indicating name of and relationship to a retiree of the University of Guelph. Recipients cannot hold this scholarship and another scholarship greater than $1,500 at the same time.

Donor(s): University of Guelph Retirees Association (U.G.R.A.)
Qualification(s): Students with a minimum cumulative average of 75% registered in a degree program who are related to a retiree of the University of Guelph as child, grand child or great grand child who have not held the scholarship before.
Amount: 1 award of $1,500

Van Straelen and Van Der Hoeven Memorial Scholarship [10296]
The scholarship will be awarded to the student who has demonstrated academic achievement and exemplary leadership. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca a one-page summary demonstrating leadership skills gained through participation in extracurricular activities, both within the university and the broader community. Preference will be given to students who have completed between 3 and 10 credits at the time of application for the award.

Donor(s): Mr. & Mrs. J. Van Straelen & family and Mr. & Mrs. Hans Van Der Hoeven & family
Qualification(s): Students registered in any program who have achieved a minimum of 80% cumulative average and participated in extracurricular activities.
Amount: 1 award of $2,000
W. Harold Minshall Scholarship [I0451]
Provided by Dr. W.H. Minshall (O.A.C.'33). Apply by May 15th to the OAC Awards Office (oacaward@uoguelph.ca) with a summary of participation in extracurricular activities and demonstrated interest and aptitude in crop protection of no more than two pages. Please include your name, student ID number and the name of the award on your application. This award may only be held once.

Donor(s): O.A.C. Alumni Foundation on behalf of Dr. W.H. Minshall
Qualification(s): O.A.C. students in the B.Sc.(Agr.), B.Sc.(Env.) or B.Sc. degree programs who have completed minimum of 15 credits, and one of the following courses in the previous fall, winter or summer semester: CRP*2420, ENV*S320, ENV*S3210, ENV*S4100, ENV*S4180, and ENV*S4190.

Amount: 1 award of $1,000

W.C. Winegard Medal [C0311]
The W.C. Winegard Medal is the most prestigious and top convocation award presented to an undergraduate student at the University of Guelph. Named for former University President Dr. William Winegard, the medal is awarded in recognition of both academic achievement and contributions to the university and community life. One student will be nominated by each College Awards Committee. The Senate Honours and Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application is not required.

Donor(s): The Board of Governors' of the University
Qualification(s): Students who have graduated in June, or who have graduated in the previous two convocations who excels both academically and in contributions made to the university and community life.

Amount: 1 award of a Gold medal

W.N. Vaughan Medal [C0299]
A medal may be given annually to a student senator who has high academic standing and who has made a substantial contribution to student life and to the university, particularly through involvement in and commitment to Senate activities. Prospective candidates will be nominated by senators and the medal winner will be chosen by a committee selected by the Senate Bylaws and Membership Committee. The medal will be awarded at June convocation. No application is necessary.

Donor(s): Friends of Walter N. Vaughan
Qualification(s): Student senator who has high academic standing and who has made a substantial contribution to student life and to the University, particularly through involvement in and commitment to Senate activities.

Amount: 1 award of a Medal

Warren Stein Memorial Scholarship [I0955]
Apply by May 15th to the OAC awards committee (oacaward@uoguelph.ca) with a letter (maximum 2 pages) outlining your studies related to swine. Please include the name of the award and the award ID number in the subject line of your email and on your letter. Selection will be based on the highest cumulative average.

Donor(s): Canadian Swine Breeders Association
Qualification(s): Students registered in any program offered by OAC who have completed 10.0 credits or more and who are engaged in swine related studies.

Amount: 1 award of $2,000

William A. Brechin Scholarship [I0574]
Established to honour the work of Maryon Brechin’s husband, O.A.C. ’36, who dedicated his career to soil and water quality concerns. Students must have a demonstrated interest and competence in soil and water quality issues such as employment or extracurricular experience in promoting environmental protection of soil and water resources. Apply by May 15 to the O.A.C. Awards Office (oacaward@uoguelph.ca) by letter of not more than two pages. Please include the name of the award and the award ID number in the subject line of your email. Please also include it in your letter.

Donor(s): Maryon Brechin
Qualification(s): Any student registered in a major offered by the School of Environmental Sciences who has completed a minimum 15.0 course credits.

Amount: 1 award of $1,500

In-course Scholarships with Financial Need

Agnes Yuen Leadership Scholarship [I4401]
Apply by October 7 to Student Financial Services with a completed University of Guelph Financial Need Assessment Form along with a statement of up to 500 words outlining leadership and involvement in volunteer activities. Selection will be based on demonstrated exemplary leadership through involvement with on campus or off campus volunteer activities (student associations/charitable or non-profit organizations) as described in a statement. ACCESS AWARD

Donor(s): Mr. John and Mrs. Agnes Yuen with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in a program offered by the Gordon S. Lang School of Business and Economics who have completed between 5.0 and 17.5 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $2,400

Anne and Ross Bronson Scholarship in Environmental Science [I4514]
Established by the family of Anne and Ross Bronson in honour of their 50th wedding anniversary with the aid of the Ontario government’s OTSS program. Preference will be given to students with a farming background. Apply by October 7th with a letter indicating leadership abilities and involvement in the university and/or broader community and farming background and a completed Financial Need Assessment Form to Student Financial Services. ACCESS AWARD.

Donor(s): Anne and Ross Bronson with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in the Bachelor of Science in Environmental Sciences or Bachelor of Bio-Resource Management Degree Environmental Management Major who have completed a minimum of 4.0 credits with demonstrated leadership abilities and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $3,200

Barbara A. Bowen Scholarship [I4390]
Established by Barbara A. Bowen, MAC ’57. Preference will be given to students registered in Department of Family Relations and Nutrition. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Barbara A. Bowen with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students who have a minimum 75% average and are registered in any degree program in the College of Social and Applied Human Science with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $5,500

Bernice and Bruce Sells Leadership Scholarship [I1011]
Created by Dr. Bruce Sells, the Dean of the College of Biological Science, 1983-1995, and his wife Mrs. Bernice Sells. Selection of the student recipient will be based on demonstrated initiative and innovation through significant involvement in extracurricular and leadership activities. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and a letter describing extra-curricular and leadership activities.

Donor(s): Dr. Bruce Sells and Mrs. Bernice Sells
Qualification(s): Students registered in any program offered by the College of Biological Science with a minimum cumulative average of 85% who have completed a minimum of 12.0 credits, have demonstrated financial need and who also demonstrate initiative and innovation through significant involvement in extra-curricular and leadership activities.

Amount: 1 award of $1,000
### Brian Kenneth Howard Memorial Scholarship [I4548]
Established by Kenneth and Irene Howard in memory of their son, Brian Kenneth Howard. Awarded to a student assessed as having financial need with a preference given to students from York, Durham or Simcoe counties. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Kenneth and Irene Howard with matching funding through the Ontario Trust for Student Support program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Student registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $3,000</td>
</tr>
</tbody>
</table>

### C.E.P.S. Dean’s Scholarship - ACCESS [I4527]
Established with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. This award may be held only once. ACCESS AWARD

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Established by a number of industrial, commercial and public sector corporations with matching funding through the Ontario Student Opportunities Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students with demonstrated financial need, registered in an honours program offered by the College of Engineering &amp; Physical Sciences who have completed a minimum of 4.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

### CEPS Computer Science ACCESS Scholarships [I4551]
Established by the School of Computer Science, friends and alumni and with the aid of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>School of Computer Science, friends and alumni and with the aid of the Ontario government’s OSOTF program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in an honours program offered by the College of Engineering &amp; Physical Sciences who have completed 4.0 credits, with demonstrated financial need. Preference will be given to students in the BCOMP program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award. OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

### CIBC Health and Science Scholarships [I4402]
Applications will be accepted beginning Fall 2020. Preference will be given in the following order: i) students who completed a summer Student Research Assistantship (S.R.A) under a University of Guelph faculty member; and ii) students who participated in cancer research-related activities. Apply by October 7 to Student Financial Services by submitting a completed Financial Need Assessment Form and include a letter outlining extracurricular activities in human health and, if applicable, highlighting cancer-related activities. ACCESS AWARD

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>CIBC with matching funding through the Ontario Trust for Student Support program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in any major offered by the College of Biological Science who have completed at least 5.0 credits with a minimum cumulative average of 75% and who have participated in extracurricular activities significant to human health. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).</td>
</tr>
<tr>
<td>Amount:</td>
<td>2 awards of $5,000</td>
</tr>
</tbody>
</table>

### City of Guelph 175th Anniversary Scholarship [I0515]
Funded by a leadership gift from the City of Guelph and donations from business and community leaders, this scholarship was established in 2002. Apply to Student Financial Services by October 7 with a letter describing volunteer activities, one reference letter from a family member or community volunteer, and a completed Financial Need Assessment Form (N.A.F.). Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need. This award may be held only once.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>The Guelph Community Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70.0% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $2,000</td>
</tr>
</tbody>
</table>

### Dr. Kenneth & Nancy Lawless [I4552]
Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Dr. Kenneth W. Lawless with matching funding through the Ontario Trust for Student Support program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Student registered in any program offered by the Ontario Agricultural College who has completed at least 5 credits with a minimum cumulative average of 75% and has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $2,700</td>
</tr>
</tbody>
</table>

### Earl B. MacNaughton C.E.P.S. ACCESS Scholarships [I4172]
Established by friends, faculty, staff, alumni and students of the University to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical and Engineering Science, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Earl B. MacNaughton with matching funding through the Ontario Student Opportunities Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students currently registered in an honours program in the College Engineering and Physical Sciences with high academic standing, demonstrated financial need, and who have completed a minimum of 15.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.</td>
</tr>
<tr>
<td>Amount:</td>
<td>2 awards of $1,500</td>
</tr>
</tbody>
</table>

### Eleanor Morgan & Bill Archibald Scholarships [I4540]
The family of Eleanor and Bill Archibald, with the assistance of the Ontario government’s OSOTF program, provide this scholarship in memory of their parents. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining community involvement to Student Financial Services by October 7. ACCESS AWARD.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>The Family of Eleanor &amp; Bill Archibald with matching funding through the Ontario Student Opportunities Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in any program with a minimum of 5.0 credits who have cumulative 70% average, have demonstrated community involvement, and financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $2,500</td>
</tr>
</tbody>
</table>

### Erin Demers Memorial Scholarship [I0406]
The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.), along with one supporting reference letter from a Residence Assistant, Residence Manager, or Residence Officer.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Family and friends of Erin Katrina Demers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $1,800</td>
</tr>
</tbody>
</table>
### Euclid-Hitachi Scholarships [I4517]
Established by Euclid-Hitachi of Canada Ltd., with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund.

**Qualification(s):** Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

### Graham Family Incentive Scholarship [I4506]
Provided by Harvey Graham (O.A.C. ’39) with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** Harvey Graham O.A.C. ’39 with matching funding through the Ontario Student Opportunities Trust Fund.

**Qualification(s):** Students entering the fourth year of a four year degree program, maintaining at least a 70% program average and demonstrating financial need, who have previously received the Harvey Graham Bursary. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $6,000

### Guelph Campus Co-operative Centennial Scholarship [I0867]
In recognition of the Guelph Campus Co-operative’s centennial anniversary and the students who founded it, this scholarship is awarded to a student who has demonstrated financial need. Preference will be given to students who are members of the Guelph Campus Co-operative. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form and a photocopy of your valid co-operative membership card.

**Donor(s):** Guelph Campus Co-operative

**Qualification(s):** Students registered in any program at the University of Guelph who have completed a minimum of 5.0 credits with a minimum cumulative average of 75% and have demonstrated financial need.

**Amount:** 1 award of $1,000

### Hung-So Chow Yuen Leadership Scholarship [I4400]
This award was established in memory of Hung-So Chow Yuen, Stacey Yuen’s (CBS BSc Hon 2003 Alumni) late Grandmother. Apply to Student Financial Services by October 7 with a University of Guelph Financial Need Assessment Form along with a statement of up to 500 words outlining leadership and involvement in volunteer activities. Selection will be based on demonstrated exemplary leadership through involvement with on campus or off campus volunteer activities (student associations/charitable or non-profit organizations) as described in a statement. ACCESS AWARD.

**Donor(s):** John and Agnes Yuen with matching funding through the Ontario Trust for Student Support program.

**Qualification(s):** Students registered in a program offered by the College of Biological Science who have completed between 5.0 and 17.5 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $2,500

### Jessica Marie Hamather Memorial Scholarship [I1017]
Established in loving memory of Jessica Marie Hamather (BSc ’15), Apply to Student Financial Services by October 7th with Financial Need Assessment form along with letter outlining extracurricular activities and volunteerism. Selection will be based on greatest financial need and students can only hold this award once.

**Donor(s):** Timothy and Maria Hamather

**Qualification(s):** Canadian citizens or permanent residents registered in any program offered by the College of Biological Science who have completed between 5.0 and 18.0 credits, have participated in extracurricular activities or volunteerism and who have demonstrated financial need. Preference will be given to students registered in the Biomedical Science major.

**Amount:** 1 award of $1,000

### MAC 1954 Scholarship [I0911]
Preference will be given to students registered in the department of Family Relations and Applied Nutrition. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Class of MAC 1954

**Qualification(s):** Students registered in any degree program offered by the College of Social and Applied Human Science with a minimum 75% average with demonstrated financial need.

**Amount:** 1 award of $1,500

### Nora Spence Memorial Scholarship [I4394]
This scholarship was created by George and Jane Spence in memory of their daughter Nora Spence, O.A.C. BSc ’06 with the aid of the Ontario government’s OTSS program. Selection will be based high academic achievement. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Jane and George Spence with matching funding through the Ontario Trust for Student Support program.

**Qualification(s):** BSC students registered in a major offered by O.A.C. who have a minimum cumulative average of 75% and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $1,750

### O.A.C. ‘52 Scholarships [I4538]
Offered by the class of O.A.C. ‘52, with the assistance of the Ontario government's OSOTF program. Apply by letter highlighting involvement in leadership and community activities and/or university life along with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** O.A.C. ’52 with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** O.A.C. students enrolled in the B.Sc.(Agr.), B.Comm., B.Sc. or B.Sc.(Env.) programs who have demonstrated financial need, who are in good academic standing and who have demonstrated leadership. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 5 awards of $3,250

### R. Douglas and Kathleen Kennedy Scholarship in O.A.C. [I0547]
Douglas (O.A.C. ’39) and Kathleen (MAC ’39) Kennedy met at a “hop” on campus in 1937 and later married. They established this scholarship to celebrate their time on campus and their 62 years of marriage. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy

**Qualification(s):** This scholarship will be awarded to a student in O.A.C. with high academic achievement and demonstrated financial need.

**Amount:** 1 award of $1,200

### Residence Life Staff Scholarship [I0697]
Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date.

**Donor(s):** Student Housing Services

**Qualification(s):** Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program.

**Amount:** 2 awards of $500

---

**Last Revision: July 4, 2019**
### Returning Student Residence Scholarship [I0696]

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must have resided in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Student Housing Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average.</td>
</tr>
<tr>
<td>Amount:</td>
<td>3 awards of $500</td>
</tr>
</tbody>
</table>

### Tara Lynn Giuliani Memorial Scholarship [I0375]

Funded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form. Selection is based on financial need.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Tara Lynn Giuliani Foundation at the Hamilton Community Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services and who have demonstrated financial need. Preference given to students with a visual impairment.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000</td>
</tr>
</tbody>
</table>

### Walter and Marion MacDougald Scholarship [I4530]

Established by the family of Walter and Marian MacDougald on the 50th wedding anniversary of their parents, in recognition of their gift of life-long learning to their five children, with the assistance of the Ontario government's OSOTF program. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter that includes a statement that outlines your interests in food supply, utilization, farmland conservation or woodlot management. Preference will be given to students enrolled in a program involved in food supply or utilization, farmland conservation or woodlot management. ACCESS AWARD.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Doug MacDougald, D.V.M. with matching funding through the Ontario Student Opportunities Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students demonstrating financial need with a minimum of 10.0 credits and less than 15.0 credits and who are in the following programs/majors/minors: BASc, BSc(Agr), BSc(Env), BSc(Food Science, Animal Biology, Nutrition, or Forest Science), or D.V.M., having a minimum cumulative average of 70%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $2,400</td>
</tr>
</tbody>
</table>

### William & Nona Heaslip Scholarship [I0589]

Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7. Recipients of this award can have this award renewed for up to 3 years provided they continue to demonstrate financial need and maintain a minimum 70% cumulative average of full-time (minimum 80% of a full course load) study. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>The William and Nona Heaslip Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students that have completed 4.0 credits but no more than 6.0 credits in any degree program; are a Canadian citizen/permanent resident; have a minimum 70% cumulative average; and demonstrate financial need.</td>
</tr>
<tr>
<td>Amount:</td>
<td>2 awards of $15,000</td>
</tr>
</tbody>
</table>

### Yeandle Family Scholarships [I3546]

Provided by the Estate of Audrey Yeandle, a Mac’25 graduate and life-long supporter of the University, with the assistance of the Ontario government’s OSOTF program. Awards will be made on the basis of financial need and academic achievement. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>The Estate of Audrey Yeandle with matching funding through the Ontario Student Opportunities Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in a program in the College of Social and Applied Human Sciences with a minimum cumulative average of 70%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td>Amount:</td>
<td>Several awards up to $2,000</td>
</tr>
</tbody>
</table>

### In-course Bursaries

#### Acer Saccharum Bursary [I3083]

Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and confirmation of registration with Student Accessibility Services.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Steven Ardown and Céline Bertaink</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in any degree program at the University of Guelph, who have demonstrated financial need and are registered with Student Accessibility Services.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $1,000</td>
</tr>
</tbody>
</table>

#### Archie and Isabelle (Cook) Rintoul O.A.C. Bursary [I3060]

Offered by Archie and Isabelle (Cook) Rintoul of O.A.C. ‘26 and MAC ‘27 respectively. Apply with a completed Financial Need Assessment Form (N.A.F.) by October 7th to Student Financial Services. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Archie and Isabelle (Cook) Rintoul</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in the department of Environmental Biology in the B.Sc., B.Sc.(Agr.) or the B.Sc.(Env.) degree programs who have completed a minimum of 10.0 credits and who have demonstrated financial need.</td>
</tr>
<tr>
<td>Amount:</td>
<td>Several awards of varying amounts</td>
</tr>
</tbody>
</table>

#### Brinson Partners Inc. Bursaries [I3526]

Brinson Partners Inc., with the assistance of the Ontario government's OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Brinson Partners Inc. with matching funding through the Ontario Student Opportunities Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td>Amount:</td>
<td>2 awards of $1,500</td>
</tr>
</tbody>
</table>

#### Burnbrae Farms Bursaries [I3525]

Established by Burnbrae Farms, with the assistance of the Ontario government's OSOTF program to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement explaining interests in poultry science to Student Financial Services by October 7. ACCESS AWARD.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td>Amount:</td>
<td>2 awards of $1,000</td>
</tr>
</tbody>
</table>

#### Campbell-Ouellette Family Bursary [I3098]

Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family’s broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

<table>
<thead>
<tr>
<th>Donor(s):</th>
<th>Dr. Malcolm Campbell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification(s):</td>
<td>Students registered in any program with demonstrated financial need.</td>
</tr>
<tr>
<td>Amount:</td>
<td>1 award of $2,000</td>
</tr>
</tbody>
</table>

---

2019-2020 Undergraduate Calendar

Last Revision: July 4, 2019
Catherine and Brian Berg Memorial Bursary [I3542]
Established by the families of Brian and Cathy Berg, with the assistance of the Ontario government's OSOTF program. Apply by completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD

Donor(s): Families of Cathy and Brian Berg with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): C.B.S. student with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $800

Class of '72: 25th Reunion Bursaries [I3512]
Established by the Class of '72: 25th Reunion Fund with the assistance of the Ontario government's OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Class of '72: 25th Reunion with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 3 awards of $1,000

Class of O.A.C. '33 Bursaries [I3531]
Established by the class of O.A.C. '33 on the occasion of their 65th Anniversary, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Class of 1933 (in honour of the late Prof. WJJ. Squirrell) with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): O.A.C. undergraduates with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

Class of O.A.C. '36 Bursaries [I3501]
Established by the Class of O.A.C. '36 with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Class of 1936 with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): An O.A.C. degree student enrolled in any degree program who has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

David Havoic Bursary [I3087]
Established by the Havoic family, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to the student with the greatest financial need. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and attach a letter from Student Accessibility Services confirming registration and physical disability.

Donor(s): Debbie and David Havoic

Qualification(s): Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.

Amount: 1 award of $1,000

David R. Leach Memorial Bursary [I3534]
Provided in memory of David R. Leach by his family, with the assistance of the Ontario government’s OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. '73 and graduated with a B.Sc. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7. ACCESS AWARD

Donor(s): Mrs Deborah Leach-Saario with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students who are physically disabled as determined by the Student Accessibility Services with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $1,000

Denis and Patricia Yates Bursary [I3097]
Established by Charlotte Yates in memory of her parents who were strong advocates for the value of education in society. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Dr. Malcolm Campbell

Qualification(s): Students registered in any program with demonstrated financial need.

Amount: 1 award of $2,000

Donald P. Watson Bursaries in Horticultural Science [I4501]
Established by the estate of Donald P. Watson, O.A.C.’34, with the assistance of the Ontario government's OSOTF program. Preference will be given to students in BLA and the CHATS major in the BSc(Agr) degree program. Apply to Student Financial Services by October 7 and include a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): The estate of Dr. Donald P. Watson with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students registered in BLA program, the BSc(Env) program, the Agriculture, CHATS, Organic Agriculture majors of the BSc(Agr) program, or the Plant Science major of the BSc program who have completed a minimum of 10.0 credits and who have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: several awards of varying amounts

Donna Demerling-Pree Bursary [I3082]
Established by Mrs. Donna Pree, Mac BHSc 1967, for first generation students registered in any program offered by the College of Social and Applied Human Sciences. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form and a statement identifying as a first-generation student.

Donor(s): Mrs. Donna Pree, Mac BHSc 1967

Qualification(s): Students registered in any program offered by the College of Social and Applied Human Sciences with demonstrated financial need and a minimum of 10.0 completed credits. Preference will be given to students registered in BASc. With a major in Applied Human Nutrition or BASc. With a major in Child, Youth and Family.

Amount: 1 award of $1,000

Dr. Gordon Macleod Memorial Bursary [I3093]
Established in memory of Dr. Gordon Macleod and in dedication to his interest in the dairy industry. Apply to Student Financial Services (awards@uoguelph.ca) with a completed Financial Need Assessment Form (N.A.F.) and a letter reflecting on your interest in dairy related studies by October 7. Please be sure to include your name, student ID number, your program of study and the award you’re applying to on your letter and application. Please supply your email application to awards@uoguelph.ca and include the award name and ID number in the subject line.

Donor(s): Cynthia Macleod

Qualification(s): Students registered in any degree program offered by OAC, who have financial need and who can demonstrate an interest in dairy related studies.

Amount: 1 award of $3,000

Elizabeth Burton Bursaries [I3503]
Mrs. Elizabeth Burton, with the assistance of the Ontario government's OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: Several awards of varying amounts

F. Elsie M. Brown and William R. Brown Bursary [I3091]
Supported by a gift from the Estate of Fredelene Elsie May Brown and her predeceased husband, William Robert Brown. Apply to Student Financial Services by Oct 7 with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Estate of Fredelene Elsie May Brown

Qualification(s): Students registered in any program offered by the OAC who have completed at least 10.0 credits and demonstrate financial need.

Amount: 2 awards of $2,500
George and Margaret J. Miles Memorial Bursary [I3544]

Established by the family to honour the memory of the parents, George and Margaret J. Miles, life long supporters of education. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter describing involvement in extra-curricular activities to Student Financial Services by October 7. ACCESS AWARD

Donor(s): Established by the Miles Family with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): All undergraduate arts and social science students with demonstrated financial need who are in or beyond semester 3 and have at least a 75% cumulative average in all courses completed to date are eligible to apply. Preference will be given to students who participate and provide leadership in extra-curricular or community activities (examples include student government, charitable organization, volunteer work, Big Brothers/Sisters, contributions to school and/or community, etc.). Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $2,000

Gryphon Investment Council Bursaries [I3513]

Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,500

Guelph Compassionate Health and Dental Bursary [I3061]

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph's mandatory Student Health Plan, University of Guelph's Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment form; (2) a letter from physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and its impact on the student's studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) Insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

Donor(s): Student Health and Dental Plan Reserve

Qualification(s): Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student's academic progress.

Amount: Several awards of various amounts to a maximum of $1,500

Guelph Student Assistance ACCESS Bursaries [I3556]

These bursaries have been established and approved by undergraduate students through student referendum with the aid of the Ontario government's OTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: Several awards of varying amounts up to $1,000

Guelph Student Assistance Program [I3056]

These bursaries have been established and approved by undergraduate students through student referendum to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): Undergraduate Students

Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need.

Amount: Several awards of varying amounts up to $1,000

Gwen Karr Memorial Bursary [I3010]

Mr. T.K.C. Karr, O.A.C. '32, has provided an endowment fund to assist students in a degree or diploma program of the Ontario Agricultural College. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Mr. T.K.C. Karr, O.A.C. '32

Qualification(s): O.A.C. students with demonstrated financial need.

Amount: Several awards of various amounts

Helen Mahon Memorial Bursary [I3063]

Established in memory of Helen Mahon, a longtime employee of the University of Guelph and who, following the death of her husband, raised three young children alone, all of whom graduated from university. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a statement that indicates you meet the criteria of this bursary. Awarded in the winter.

Donor(s): Family and Friends of Helen Mahon

Qualification(s): Students registered in any program who come from a family where one parent is deceased.

Amount: 1 award of $500

Howard and Myrtle Rogers Bursaries [I3537]

Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): The Estate of Howard and Myrtle Rogers with matching funding through the Ontario Student Opportunities Trust Fund

Qualification(s): Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate on-going financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 10 up to $2,000

Indigenous Student Bursary [I3068]

In 2009, the Ministry of Advanced Education and Skills Development established the Indigenous Student Bursary as part of their new Aboriginal post-secondary education funding initiative. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with financing their education. Apply to Student Financial Services by October 7th with a Financial Need Assessment Form and complete the Indigenous Student Bursary application. Selection is based on financial need.

Donor(s): Ministry of Advanced Education and Skills Development (MAESD)

Qualification(s): Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP) and have demonstrated financial need.

Amount: several awards ranging in values from $1,000 to $3,500

International Emergency Medical Aid Assistance [I3059]

The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an on-going basis.

Donor(s): University of Guelph

Qualification(s): International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.

Amount: Several awards of varying amounts
Irvine and Grace Black Memorial Bursary [I3051]

Established in memory of Irvine and Grace Black, by friends and family to recognize their many contributions to young people. Irvine, a well-known sheep breeder, was a judge at College Royal and the Royal Winter Fair for over fifty years, and Grace was active in the Women's Institute and the Fergus Fall Fair. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining involvement in the 4-H Club and/or a Women's Institute by October 7.

**Donor(s):** Family and friends of Irvine and Grace Black

**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to applicants who are, or have been, active in the 4-H Club and/or a Women's Institute.

**Amount:** 1 award of $500

Ivey Cook Bursaries [I3076]

Apply to SAS using the “New Student Intake Form” and a letter explaining your situation and attach documentation showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first come first served basis, based on the validity and need for an assessment.

**Donor(s):** Suzanne Ivey Cook

**Qualification(s):** Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment.

**Amount:** several awards of up to $1,000

Joan Weatherly Memorial Bursary [I3065]

Established by the estate of Joan Weatherly, CSS BA ’82, a long-time employee of the University and Sociology graduate with a keen interest in the issues of mature female students. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) and a letter identifying admission status as a mature female student, if applicable. Preference will be given to mature-applicant status female students.

**Donor(s):** The Estate of Joan Weatherly

**Qualification(s):** Students registered in any degree program in the departments of Geography, Political Science, Psychology and Sociology & Anthropology with demonstrated financial need.

**Amount:** 1 award of $1,500

John & Margaret Van Loon Family Bursary in Science [I3549]

Established on behalf of the Van Loon Family in honour of parents John & Margaret Van Loon. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Mr. Paul Van Loon and Mrs. Lauralene Van Loon

**Qualification(s):** Students registered in any program in the College of Biological Science or the College of Physical & Engineering Science who have completed a minimum of 2.5 credits. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $1,500

Joyce Barclay-Ogden Bursary [I3074]

Selection will be based on financial need. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Joyce Ogden

**Qualification(s):** Students registered in any program in the College of Social and Applied Human Sciences with demonstrated financial need.

**Amount:** 1 award of $1,000

Leroux Bursaries [I3535]

Established by Mr. Hector Leroux, O.A.C.’44, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Mr. J.H. Leroux with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** O.A.C. degree students in the B.Sc.(Ag.), B.Sc., B.Com. or B.Sc.Env.) programs with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

Madison Gough Memorial Bursary [I3103]

Established by the friends and family of Madison Gough, a gentle, kind spirit who was inspired by nature, animals, or music and passionate about acceptance of difference. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Bob Gough and Laura Ladouceur

**Qualification(s):** Students registered in any program who have demonstrated financial need.

**Amount:** 1 award of $1,000

Marie Hardacre Bursary [I3548]

Established by Mrs. A. Marie Hardacre, MAC DHE 1930 for students in CSAHS with a preference to female students registered in the Department of Family Relations and Applied Nutrition. Apply by October 7 to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Mrs. A. Marie Hardacre with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Students registered in any academic program in the College of Social and Applied Human Sciences with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $5,000

Mary I. Whitelock Bursaries [I3524]

Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Estate of Mary I. Whitelock with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSSF award (see General Statements on Awards).

**Amount:** 13 awards of $2,000

Mason Real Estate Environmental Sciences Bursary [I3106]

Students should apply by October 7th to the Student Financial Services with a completed Need Assessment form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Selection will be based on financial need.

**Donor(s):** Mason Real Estate Ltd

**Qualification(s):** Students enrolled in the Bachelor of Environmental Sciences program with demonstrated financial need.

**Amount:** 1 award of $1,500

Métis Nation of Ontario Bursary [I3092]

The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and a statement confirming Métis status and include your card number.

**Donor(s):** Métis Nation of Ontario

**Qualification(s):** Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.

**Amount:** 1 award of $1,000

Murray P. And Florence L. Hannah Bursaries [I3571]

Preference will be given to students from the County of Northumberland. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Estate of Florence Hannah with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** OAC students registered in the BSc(Agr.) or the BSc(Env) program who have completed a minimum of 4.0 credits with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** several awards of varying amounts
IX. Scholarships and Other Awards, Bachelor of Science in Environmental Sciences

**Norma Valeriote International Student Bursary** [I3009]

Preference given to a student from a country of focus as defined by CIDA (Canadian International Development Agency). Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.

**Donor(s):** Mrs. Norma L. Valeriote

**Qualification(s):** International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.

**Amount:** Several of varying amounts

**O.A.C. ’38 Lloyd Minshall Bursaries** [I3529]

Established by O.A.C. ’38 Alumni, with the assistance of the Ontario government’s OSOTF program, to recognize the many contributions of Lloyd Minshall to his classmates and to O.A.C. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** O.A.C. ’38 Alumni with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** several awards of varying amounts

**O.A.C. ’55 Access Bursaries** [I3517]

Provided by the class of O.A.C. ’55 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** O.A.C. Class of ’55 with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students at any semester level in an O.A.C. degree program or students enrolled in the B.ENG. program with demonstrated financial need and a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).

**Amount:** several awards of varying amounts

**O.A.C. ’57 Bursaries** [I3518]

Provided by the Class of O.A.C. ’57 with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** O.A.C. ’57 and the O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** O.A.C. undergraduate degree students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** several awards of varying amounts

**O.A.C. Alumni Foundation Access Bursaries** [I3533]

Provided by the O.A.C. Alumni Foundation, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** O.A.C. Alumni Foundation with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** O.A.C. undergraduate students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** several awards of varying amounts

**OAC Student Aid Bursary** [I3590]

Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Anonymous with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in any OAC Undergraduate Degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** several awards of varying amounts totalling $8,000

**Ontario Co-operatives R.P. Forshaw Bursary** [I3013]

The Co-operatives, Credit Unions, friends and associates of Prof. R. P. Forshaw have established this bursary. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7 and a letter indicating membership of co-op or credit unions.

**Donor(s):** The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw

**Qualification(s):** Undergraduate students who have financial need. Preference may be given to candidates who have been or are members of a co-operative or credit union.

**Amount:** 1 award of $400

**Ontario Federation of Agriculture Bursaries** [I3520]

Provided by the Ontario Federation of Agriculture and the O.A.C. Alumni Foundation with the assistance of the Ontario government's OSOTF program. Apply with a letter indicating 4H and/or rural community involvement and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. To be considered for this award you must indicate it on our N.A.F and include a statement outlining your extracurricular activities. ACCESS AWARD

**Donor(s):** Ontario Federation of Agriculture with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** O.A.C. students with demonstrated financial need enrolled in the B.Sc.(Agr.), B.Comm., B.Sc. or B.Sc.(Env.) programs. Preference will be given to students from farm families who have participated in 4H and/or rural community activities. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

**Ontario First Generation Bursary** [I3062]

The Ministry of Advanced Education & Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.

**Donor(s):** Ministry of Advanced Education & Skills Development (MAESD)

**Qualification(s):** Students registered in any program who are first generation students, Ontario residents (as defined by OSAP) and who have demonstrated financial need.

**Amount:** several awards ranging in values from $1,000 to $3,500

**Ontario Grape Growers Bursary** [I3033]

Offered by the Ontario Grape Growers Action Committee. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** The Ontario Grape Growers Action Committee

**Qualification(s):** Students with good academic standing in semesters 3 to 6 of a degree program or semesters 3 to 4 of a diploma program administered by O.A.C., and demonstrated need of financial assistance.

**Amount:** Several of various amounts

**Ontario University Registrar’s Association Bursary** [I4393]

Established in recognition of an innovative student fee protocol put forward by the Student Executive Council to reduce energy use by upgrading campus buildings through an energy retrofit program. AApply by October 7th to Student Financial Services with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Ontario University Registrars’ Association (OURA) with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Students registered in the Bachelor of Environmental Sciences with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of up to $1,000
Robert Auger Humanitarian Bursary [I3058]
Established in memory of Bob Auger, a former Associate Registrar at the University of Guelph. It is intended as an emergency fund to assist students who unexpectedly find themselves in difficult financial situations who could benefit from receiving a grocery voucher. To be considered, students must have completed a Financial Aid Assessment form and arrange an appointment with a Financial Aid Counsellor. Appointments can be made by calling 519-824-4120 extension 58715.

Donor(s): Family and friends of Robert Auger
Qualification(s): Students registered in any degree program with an unexpected financial emergency.
Amount: Several grocery vouchers or book vouchers

Ron Scriver Memorial Bursary [I3547]
Established in memory of Mr. Ron Scriver (1946 - 2005) C.E.P.S. B.A. ’76, to honour his outstanding 32-year career with the Ontario Universities’ Application Centre and his extensive involvement with colleagues throughout the University system. Preference will be given to students registered in the Bachelor of Computing Science Program. Apply with a Financial Need Assessment Form to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Family and Friends of Ron Scriver with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any program offered by C.E.P.S.
Amount: 1 award of $2,000

Scotiabank Bursaries [I3532]
Established by Scotiabank, with the assistance of the Ontario government’s OSOTF program, to assist students with financial needs to continue their studies as full-time students. Distributed in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Scotiabank with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: 2 awards of $1,500

Shirley Endean Bursaries [I3570]
These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Estate of Shirley E. Endean & multiple donors with matching funding through the Ontario Trust for Student Support program
Qualification(s): Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

Student Financial Services Bursary [I3107]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

Donor(s): University of Guelph
Qualification(s): Considered for registration for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.
Amount: Several awards up to a maximum of $6,000

T.K. Warley Bursaries [I3510]
Established by O.A.C. Alumni Association, with the assistance of the Ontario government’s OSOTF program, to recognize Professor T.K. Warley’s significant contribution to the O.A.C. Alumni Foundation and to students through teaching and promotion/development of “Experience Agriculture”. A degree student may receive this bursary twice. Apply by letter outlining extracurricular involvement and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

Donor(s): O.A.C. Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with demonstrated financial need who are in semester 5 to 8 of any degree program within O.A.C. A minimum 65% is required, as is participation in student activities, governance, and/or college affairs. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of varying amounts

Tony and Nan Legris Bursary [I3072]
Established by Rosemary Legris in memory of her parents, Tony and Nan Legris. Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

Donor(s): Rosemary Legris
Qualification(s): Students registered in any program in the College of Social and Applied Human Sciences with demonstrated financial need.
Amount: 1 award of $1,200

Uffelmann Connor Family Bursary for Indigenous Students [I3109]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Metis or Inuit).

Donor(s): Maris Uffelmann and Dean Connor
Qualification(s): Students registered in any program who self-identify with First Nations (Status and non-Status), Metis or Inuit ancestry and who demonstrates financial need.
Amount: 1 award of $1,000

Uffelmann Connor Family First Generation Bursary [I3108]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success. Apply by October 7th to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as a first-generation student.

Donor(s): Maris Uffelmann and Dean Connor
Qualification(s): Students registered in any program who is a first-generation student (First generation students (parents did not attend post-secondary studies, full-time or part-time, in or outside Canada at any time or in any program) registered in any program with demonstrated financial need. and who demonstrates financial need.
Amount: 1 award of $1,000

University of Guelph Access Bursaries [I3522]
Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Alumni and Friend of the University of Guelph with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
Amount: Several awards of $500, Several awards of $2,000
### University of Guelph Alumni Association Access Bursaries [I3523]

Established by the University of Guelph Alumni Association, with the assistance of the Ontario government’s OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** University of Guelph Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,250

### William Barlow Memorial Bursary [I3101]

This bursary was created to recognize the farming contributions and community spirit of Mr. Barlow. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Selection will be based on financial need. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Mr. William Barlow

**Qualification(s):** Students registered in any program within the Ontario Agricultural College at the University of Guelph who is from Durham Region, Northumberland County, or County of Victoria including City of Kawartha Lakes and has demonstrated financial need.

**Amount:** 1 award of $3,000

### University of Guelph International Bursary [I3048]

The University of Guelph provides scholarships to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Students should apply to the International Student Advisor by Nov. 1 for the fall semester, March 1 for the winter semester, and July 2 for the summer semester with a completed International Student Financial Need Assessment Form (N.A.F.). If students have an emergency situation, please contact the International Student Advisor, in Student Life, University Centre, Level 3.

**Donor(s):** University of Guelph

**Qualification(s):** International students registered in a degree program who have completed a minimum of 4.0 credits and are registered in a minimum of 1.5 course credits.

**Amount:** Several varies

### University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [I3047]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph

**Qualification(s):** Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards to a maximum of $2,000

### University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph

**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.

**Amount:** Several awards up to a maximum of $6,000

### University Student Assistance Program [I3057]

These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph

**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as the Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).

**Amount:** Several awards of various amounts to a maximum of $1,000

### Virginia Conner Memorial Bursary [I3110]

Apply by October 7th to the Student Financial Services with a completed Financial Need Assessment form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Selection will be based on financial need.

**Donor(s):** Estate of Virginia Conner

**Qualification(s):** Students registered in any program offered by OAC with demonstrated financial need.

**Amount:** Several awards of up to $2,000

### In-course Travel Grants

#### E.E. Wolff International Scholarship [T0313]

The late Frank E. Wolff was a faculty member and a graduate of O.A.C. He was active in the O.A.C. Alumni Foundation and in the establishment of the O.A.C. Alumni Foundation. This scholarship fund was established in memory of Frank E. Wolff, Mr. A.O. Wolff and family. As a faculty member, he studied the techniques of artificial insemination of cattle in Denmark and upon his return in 1939, employed these techniques in the O.A.C. herd. Apply to the OAC Awards Office by February 1 with a letter outlining the cost of your trip for this course. Please be sure to include your name, student ID number, your program of study and the award you’re applying to on your application. Please email your application to oacaward@uoguelph.ca and include the award name and ID number in the subject line.

**Donor(s):** Mr. A.O. Wolff (Sr.)

**Qualification(s):** Students registered in any program offered by OAC with a minimum 70% cumulative average and who are registered AGR*2500 (Field course in International Agriculture with field trip to Costa Rica).

**Amount:** several awards of varying amounts

### O.A.C. ’54 International Study Scholarship [T0586]

Established in memory of Beth Duncan to support students participating in an exchange program, study abroad semester, or a field trip course. Submit a letter (of not more than two pages) outlining the intended international study program, reasons for choosing the program and the anticipated benefits of participation. Letters should also include a brief summary of extracurricular and student related activities. Letters of reference will be considered. Apply to the O.A.C. Awards Office by May 15, no more than two semesters prior to the commencement of the program.

**Donor(s):** Class of O.A.C. ’54

**Qualification(s):** Currently registered students in O.A.C. who are Canadian citizens or permanent residents with a minimum 75% cumulative program average who intend to participate in an exchange program, semester abroad, or field trip course.

**Amount:** 2 awards of $3,000
Bachelor of Science in Technology

Please refer to the General Statement on Awards for:

- Award Eligibility
- ACCESS Awards Eligibility
- Ontario Student Opportunity Trust Fund (OSOTF) Program
- How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

Entrance Scholarships

Angelo and Frank Agro Undergraduate Scholarship [E0520]

These scholarships are provided by the Agro Scholarship Fund. Apply, by April 15, to Student Financial Services (awards@uoguelph.ca), with a one to two-page, point-form listing of 4-H activities. This list should describe current or past activities within 4-H and the position titles/names, if applicable. Attach a reference letter from a 4-H club official. These scholarships will be awarded to the students demonstrating the most active involvement with 4H clubs. The committee will consider any appropriate elements, such as the length of membership in 4H, leadership role(s) in support of 4H, creativity in 4H outreach, and coordination with other rural and academic activities. Credit will be given to those who have achieved in county, provincial and national 4H competitions. Recipients must maintain full-time studies and at least a 70% program average each year for continuation of the award.

Donor(s): The Frank Agro Estate
Qualification(s): Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 - 4H projects.
Amount: 7 awards of $7,000 (payable over 4 years of study)

Board of Governors’ Scholarships [E0317]

This scholarship is considered one of the University of Guelph's most prestigious entrance scholarships with only 25 awards being awarded each year. Recipients of this scholarship are entering their program with one of the highest admission averages of that cohort. The scholarship will be renewed each year provided recipients remain registered in full-time studies and achieve a minimum 80.0% average in their previous academic year of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80.0% or better average in the previous academic year of full-time study. Payments lost cannot be added to the end of the award period. This scholarship cannot be held with the President's, Lincoln Alexander Chancellor's or Governors' Scholarships. Application is not required.

Donor(s): Board of Governors
Qualification(s): Academically outstanding entering students with the highest admission averages of the entering cohort.
Amount: 25 awards of $20,000 (payable over 4 years of study)

Chancellor's Scholarships [E0688]

This scholarship was established in 2009 in honour of current and past University of Guelph Chancellor and is considered one of the most prestigious entrance awards offered by the University of Guelph. Selection will be made on demonstrated superior leadership ability and potential as evidenced through positions held, extra-curricular activities, involvement in high school and communities and reference support. Students apply by January 25 by completing the online application. Short-listed candidates will be invited to campus for an interview. This scholarship cannot be held with the President’s Scholarships, the Lincoln Alexander Chancellor's Scholarships, or the Board of Governors’ Scholarships.

Donor(s): University of Guelph
Qualification(s): Students entering a degree program with a minimum 90% admission average who have taken leadership roles in activities that demonstrate an interest in international relations and development, or leadership roles in activities relating to arts and culture and demonstrate the potential to become a leader in society.
Amount: 2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistance)

December 6th Memorial Scholarship [E0005]

This scholarship, established by the Faculty Association, is awarded in memory of the fourteen women murdered in December 1989 at Ecole Polytechnique and is intended to attract women to a profession that is largely comprised of men. The recipient will be selected on the basis of academic performance. For continued eligibility beyond semester 1, the student must maintain a minimum of 70% cumulative average and full-time studies.

Application is not required.

Donor(s): University of Guelph Faculty Association
Qualification(s): Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Engineering and Physical Sciences.
Amount: 1 award of $2,250 ($750 in each of semesters 1, 3 and 5).

Earl B. MacNaughton Entrance Scholarships [E0172]

Established by friends, faculty, staff, alumni and students of the University to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Emphasis during selection will be given to academic achievement in high school science and mathematics. Application is not required.

Donor(s): Earl B. MacNaughton
Qualification(s): Students with high academic standing, entering an honours program in the College of Engineering and Physical Sciences.
Amount: 4 awards of $2,000

Ed Carter/University of Guelph Faculty Association Scholarship [E0292]

Award is payable at $750 per annum in the student's 1st, 3rd, and 5th semester levels, provided a cumulative average of at least a 70% is maintained. To receive the final payment, the recipient must normally be entering the 5th semester level within a period of 3 calendar years from the date of admission. Awarded to the student with the highest admission average. Application is not required.

Donor(s): University of Guelph Faculty Association
Qualification(s): Students entering any undergraduate degree program at the University of Guelph from Wellington county.
Amount: 1 award of $2,250 ($750 in the 1st, 3rd, and 5th semesters)

Ernie Kendall Science Entrance Scholarship [E0668]

Established by Ernest Kendall, O.A.C. B.S.A. 1932 and awarded to the student entering a science program with the highest admission average. Preference will be given to students that graduated from Elmira District School. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Board of Governors' Scholarships. Application is not required.

Donor(s): Ernest W. Kendall
Qualification(s): Students entering any sciences (B.Sc., B.Sc.(Agr.), B.Sc.(Env.), B.Sc.(Tech), B.A.Sc., B.A.S., B.B.R.M., B.Eng.) degree program with a minimum 80.0% admission average.
Amount: 1 award of $2,000

Gordon W. Innes Scholarship [E0140]

Application is not required.

Donor(s): Gordon W. 'Sparks' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.
Qualification(s): Student entering any degree program from Oxford County with the highest admission average.
Amount: 1 award of $1,000

Hardy International Student Scholarship [E0659]

Selection is based on the assessment of the student's admission application and preference is given in the following order: students from Haiti; students from Africa; then any other international student. Application is not required.

Donor(s): Mrs. Marion Hardy
Qualification(s): Full-time international students (defined as paying the international student tuition and fees) entering any degree program.
Amount: 1 award of $2,000

Honours Physics Scholarship [E0132]

Several of these awards will be offered on a competitive basis to students entering with the highest admission averages. The number of scholarship offers is dependent on the cohort pool of applicants. Application is not required.

Donor(s): Department of Physics
Qualification(s): Students entering the first semester level of the B.Sc. program or the B.Sc. (Tech.) program with a minimum 85.0% admission average and a declared intention of pursuing a major in Physics, Physics and Technology, Biophysics, Chemical Physics, or Theoretical Physics, or a Co-op stream of these programs.
Amount: Several awards of $4,000

International Student Entrance Scholarships [E0408]

In support of the University's strategic direction of internationalism, entrance scholarships are available each Fall semester to the top international students entering their first semester of an undergraduate degree program at the University of Guelph. Applicants must submit all relevant documentation for admission consideration by March 1 to be considered for a scholarship. These scholarships are awarded on a competitive basis. Application is not required.

Donor(s): University of Guelph
Qualification(s): Students on a "student visa" entering an undergraduate degree program at the University of Guelph with a record of high academic achievement and extracurricular involvement, and studying full-time. This award is offered for the first year of study.
Amount: Several awards ranging in value from $5,500 - $8,500

Last Revision: July 4, 2019
2019-2020 Undergraduate Calendar
<table>
<thead>
<tr>
<th>Scholarship Program</th>
<th>Amount</th>
<th>Qualification(s)</th>
<th>Donor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>J.D. MacLachlan Scholarship [E0170]</strong></td>
<td>1 award of $1,500</td>
<td>Students entering any degree program at the University of Guelph.</td>
<td>The J.D. MacLachlan Trust</td>
</tr>
<tr>
<td><strong>Jack and Lillian MacDonald Scholarship [E0379]</strong></td>
<td>1 award of $900</td>
<td>Students entering degree program with a minimum 90% admission average.</td>
<td>Family, friends, and colleagues of Lillian MacDonald and Dr. Jack MacDonald,</td>
</tr>
<tr>
<td><strong>Lincoln Alexander Chancellor's Scholarships [E0689]</strong></td>
<td>1 award of $900</td>
<td>Students entering the Six Nations Polytechnic (SNP).</td>
<td>Lincoln Alexander, Chancellor Emeritus of the University of Guelph and former Lieutenant</td>
</tr>
<tr>
<td><strong>McArthur-Humphries Scholarship [E0183]</strong></td>
<td>2 awards of $42,000 ($8,250 annually for 4 years of study plus one $9,000 stipend for summer research assistantship)</td>
<td>Students entering any degree program with a minimum 90% admission average who have made significant leadership contributions to their schools and communities. In addition, students must be: Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person.</td>
<td>Provided by the family of J.D. MacLachlan. The recipient will be the student entering with the highest admission average. Application is not required.</td>
</tr>
<tr>
<td><strong>President's Scholarship [E0238]</strong></td>
<td>8 awards of $1,000</td>
<td>Students entering any degree program with a minimum 75% admission average.</td>
<td>Many Donors</td>
</tr>
</tbody>
</table>

**Note:** The information provided in the table is based on the content of the document and may not be exhaustive. For complete and up-to-date information, please refer to the official source.
**Project Hero Scholarship [E0979]**
The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted.

This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph  
**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

**Amount:** Plus $8000 toward 1st year living expenses

---

**Ted Morwick Scholarship [E0796]**
Established by Ted Morwick, honorary alumni. The student with the highest admission average will be selected. This award is conditional on maintaining a 80% average in the previous year of full time study. If a current award recipient does not meet the renewal criteria for one year, they will be given the opportunity to re-qualify. (i.e. The student recipient does not maintain 80% in their first year. They will not receive the award for their second year of school. If at the end of their second year they have raised their average back up to 80% or higher, they would receive the award for their third year.) If a student does not qualify for two years in a row, they would fully lose the award, with no opportunity to re-qualify. This scholarship is not tenable with the Chancellor’s, President’s or Board of Governors’ Scholarships. Any application is necessary.

**Donor(s):** Mr. Edward (Ted) Morwick  
**Qualification(s):** Students entering any degree program in the College of Arts.

**Amount:** 4 award of $8,000 (payable over four years.)

---

**University of Guelph Entrance Scholarships [E0291]**
The value of this scholarship is determined by the admission average as calculated by Admission Services and will be offered with your offer of admission to Guelph. The scholarship will be applied directly to the student’s financial account in two equal payments in the fall and winter semesters. Application is not required.

**Donor(s):** University of Guelph  
**Qualification(s):** Students entering their first year of post-secondary education for the first time with a minimum 85.0% admission average.

**Amount:** Several awards of $2,000, Several awards of $3,000

---

**W. Penri Morris Memorial Scholarship [E0430]**
Established by the family in memory of Penri Morris, who was killed World War II action in 1944 at the age of 21. Penri grew up on the family fruit farm near Forest, Ontario. After graduating from high school, he joined the Royal Canadian Air Force and was attached to the Royal Air Force Bomber Command as a navigator at the time of this death. Awarded to the student with the highest cumulative academic performance above 75% in all courses of the last year in high school study (full-time or equivalent study). Application is not required.

**Donor(s):** Prof. Rosalina Morris  
**Qualification(s):** Students entering first year of any undergraduate program from North Lambton Secondary School in Forest, Ontario, in their absence, from Lambton County, and their absence from Lambton County. 

**Amount:** 1 award of $1,000

---

**W.C. Blackwood Memorial Entrance Scholarship in Physics [E0029]**
Application is not required.

**Donor(s):** Mr. B.A. Ward  
**Qualification(s):** Student entering the first semester level of the B.Sc. program, who declares the intention to pursue an honours program in Physics.

**Amount:** 1 award of $500

---

**Walter and Halina Slabikowski Scholarship [E0766]**
This scholarship was established in memory of Walter and Halina Slabikowski who sent their first generation Canadian born children to university to enrich their lives and provide them with greater opportunities. The award will be given to the student with the highest admission average. The residence deposit must be received by published deadline date. Submit by email to awards@uoguelph.ca your full name, student ID number and a statement attesting to your parents’ place of birth and non participation in post secondary education by April 15th.

**Donor(s):** Irene Thompson and Slabikowski Family  
**Qualification(s):** Students entering any degree program planning to live in a Guelph campus residence whose parents immigrated to Canada and have never participated in post secondary studies.

**Amount:** 1 award of $1,000

---

**Waterloo-Wellington Science & Engineering Fair (WWSEF) Scholarship [E0619]**
Established to recognize excellence of the project submissions and encourage students to pursue university studies at the University of Guelph.

**Donor(s):** University of Guelph  
**Qualification(s):** Gold medal winners in the Senior Entries classification (WWSEF) that are registered in year one of any degree program at the University of Guelph.

**Amount:** various awards of $1,000

---

**Entrance Scholarships with Financial Need**

**Bill Klop Memorial Scholarship [E0150]**
Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services (awards@uoguelph.ca), outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by April 15. Students should complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

**Donor(s):** Ross and Mary Lou Klop  
**Qualification(s):** Students from the cities of Kitchener or Waterloo entering a degree program at the University of Guelph with demonstrated involvement in extracurricular activities, a minimum 70% admission average and demonstrated financial need.

**Amount:** 1 award of $500

---

**Devine Family Scholarships [E4542]**
Established on behalf of the Devine Family, Mr. Peter J. Devine, a former Board of Governors member, with the assistance of the Ontario government's OTSS program. These scholarships will be given out once every four years, unless the incumbent fails to qualify. The scholarship is renewable in years two, three and four with continued demonstrated financial need and full-time registration; students are required to register for no less than 2.0 credits each semester. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and complete the “Devine Family Scholarship Application”. Deadline to submit the complete application (both parts, the E.N.A.F. and the application) is April 15th of the application year. Scholarship offers will be made in May. This award is not tenable with the President's Scholarships, the Lincoln Alexander Chancellor's Scholarships or the Chancellor's Scholarships, but can be held with all other entrance awards. ACCESS AWARD.

**Donor(s):** Mr. Peter J. Devine with matching funding through the Ontario Trust for Student Support program  
**Qualification(s):** Students who are Aboriginal (First Nations, Inuit and Métis); or a person with a disability; or a racialized person entering any University of Guelph undergraduate degree program with a minimum 70% admission average. Preference will be given to students who are Black Canadians. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** up to 2 awards of $50,000 each (payable over 4 years of study)
**Rol-Land Farms Scholarships [E4519]**
Established by Rol-Land Farms, with the assistance of the Ontario government's OSOTF program, to attract entering students who might otherwise not be able to attend university for financial reasons. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

**Donor(s):** Rol-Land Farms with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students entering a degree program with demonstrated financial need and a minimum 80% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 13 awards of $2,000

**Entrance Bursaries**

### Elizabeth Maud Hunter (Shier) Bursary [E3575]
This award was created to assist first year students in obtaining a post secondary education and is in honour of Mr. Hunter’s late wife, Elizabeth Maud Hunter (Shier) who did not have the opportunity to attend the University due to the sudden death of her mother resulting in family responsibilities. It was her wish to support a female student facing a similar situation. Preference given to a student from the County of Brock. Apply by April 15 to Student Financial Services by completing the online Financial Need Assessment Form (N.A.F.) for Entrance Awards. ACCESS AWARD

**Donor(s):** The Estate of the Late William Henry "Harry" Hunter with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Students entering any degree program at the University of Guelph with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 3 awards of up to $4,500

### First Year Student Residence Bursary [E3066]
These 5 bursaries will be offered to the students with the greatest demonstration of financial need and are conditional upon the student residing in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date. Students should apply by completing the online Financial Need Assessment Form for Entrance Awards by April 15.

**Donor(s):** Student Housing Services

**Qualification(s):** Students entering any degree program with demonstrated financial need.

**Amount:** 5 awards of $500

### Harvey Graham Bursary [E3030]
Provided by Harvey Graham (O.A.C. '39). Apply by submitting a letter to Student Financial Services, (awards@uoguelph.ca) by April 15 that states being raised on a working farm and complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student).

**Donor(s):** Harvey Graham, O.A.C. '39

**Qualification(s):** Students entering any degree program who come from a working farm and who have demonstrated financial need. Preference to students graduating from Lindsay C.V.I., Fenelon Falls Secondary School, or I.E. Weldon Secondary School.

**Amount:** 1 award of $1,500

### International Student Entrance Bursaries [E3043]
In support of the University's strategic direction of internationalism, entrance bursaries are available each fall to assist some of our international students entering an undergraduate degree program at the University of Guelph. Apply by March 1 by submitting the International Registrar's Entrance Award Application to Student Financial Services.

**Donor(s):** University of Guelph

**Qualification(s):** Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.

**Amount:** Several awards ranging in value from $1,000 to $3,000

---

**Interhall Council Entrance Scholarship [E0636]**
Established by the Interhall Council, the residence student government that programs, advocates and represents residence students to administration and Student Housing Services (www.interhall.ca), to ensure that the residence experience remains accessible to students. To apply, students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) and submit a one-page, point-form summary highlighting extra-curricular activity that demonstrates leadership ability to Student Financial Services (awards@uoguelph.ca) by April 15.

**Donor(s):** Interhall Council

**Qualification(s):** Students entering a full-time undergraduate degree program with a minimum 85.0% admission average, residing in residence during first year on the Guelph campus with demonstrated financial need and demonstrated strong leadership ability.

**Amount:** 5 awards of $1,000

**Kenneth O. Hammill-Blount Canada Scholarship [E4356]**
Established in honour of Kenneth Osborne Hammill, a long time friend of the University and retired plant manager of Blount Canada, with the assistance of the Ontario government's OSOTF program. Selection will be based on greatest financial need from the President’s, Lincoln Alexander Chancellor's or Chancellor's Scholarships applicants who were interviewed, but not successful in the competition. Continuation of this scholarship is conditional on maintaining a minimum 77% average over the previous full-time academic year of study and continued demonstration of financial need. Students who submitted an application for the President’s, Lincoln Alexander Chancellor's or Chancellor's Scholarships should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) by April 15. ACCESS AWARD.

**Donor(s):** The Blount Foundation, Inc. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Entering students who have applied for the President’s, Lincoln Alexander Chancellor's or Chancellor's Scholarships who are interviewed, but not successful in the competition with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $9,600 (payable in 8 payments of $1,200)

**L. Norman Gibbins Microbiology Scholarship [E4392]**
Established through a generous bequest from L. Norman Gibbins, with the assistance of the Ontario government's OTSS program, in support of training in Microbiology. Preference will be given to students entering the Microbiology Co-op major. Students should complete the online Financial Need Assessment Form for Entrance Awards (E.N.A.F.) application as soon as they receive their Acknowledgement Package from Admission Services (this will come automatically after an application for admissions has been submitted by the student) or by April 15. ACCESS AWARD

**Donor(s):** Family, friends and colleagues of Norman Gibbins with matching funding through the Ontario Trust for Student Support program

**Qualification(s):** Students entering the Microbiology major in the B.Sc. program with a minimum 80% admission average and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $2,500

**P.A.J. Clarke Family Scholarship [E0581]**
Paul and Aileen Clarke and their family established the endowment for this entrance scholarship in honour of Paul's father, the late Jack Clarke, a Blenheim area farmer. Apply by April 15 to Student Financial Services (awards@uoguelph.ca) with a letter outlining extracurricular and/or community activities, and complete the Financial Need Assessment Form for Entrance Awards (E.N.A.F.). Financial need will be considered, but is not a requirement. This award is not tenable with the President's Scholarships or Lincoln Alexander Chancellor's Scholarships. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

**Donor(s):** Paul and Aileen Clarke

**Qualification(s):** Students with a minimum 80% average with a record of leadership and community participation. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm.

**Amount:** 1 award of $12,000 (payable over 4 years)
In-course Scholarships

Aboriginal Student Engagement Scholarship [I0922]

Established in 2014 by the Aboriginal Student Association, the Aboriginal Student Engagement Scholarship demonstrates the ASA’s commitment to supporting Aboriginal learners. The scholarship will be awarded to a student identifying as First Nation (status and non-status), Métis or Inuit, who is engaged in the Aboriginal community either in their home community or at the University of Guelph. Apply to Student Financial Services by May 15 with a one-page letter self-identifying as First Nation (status and non-status), Métis or Inuit and outline volunteer/leadership experience within the Aboriginal community. The letter must be accompanied by a document from a member of their community (such as an elder, employer, volunteer supervisor or ARC staff member) with an explanation of the volunteer/leadership involvement and illustrating the contributions of the student to the Aboriginal community including number of volunteer hours. This can include but not be limited to involvement and volunteer roles with the Aboriginal Resource Centre at the University of Guelph.

Donor(s): Aboriginal Student Association
Qualification(s): Students registered in any degree program at the University of Guelph who have been an employee of the Aboriginal House Call Centre.
Amount: 1 award of $1,000

Alumni House Call Centre Scholarship [I1020]

Generously donated by the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Apply to Student Financial Services by May 15th with a letter from the Alumni Advancement Manager, Telefundraising & Parents confirming employment within the Call Centre and the length of the employment.

Donor(s): Former Employees of the Alumni House Call Centre
Qualification(s): Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre for a minimum of nine months and who have achieved a minimum cumulative average of 75% are eligible.
Amount: 1 award of $1,000

Amina Kapadia Memorial Scholarship [I1093]

This scholarship was created and funded by the Kapadia Family and Department of Chemistry, in the memory of Ms. Amina Kapadia who died with her parents in a tragic house fire on February 14, 2017.

Donor(s): The Kapadia Family
Qualification(s): Student registered in the Biological and Pharmaceutical Chemistry major who completed CHEM*1040 in the previous academic year (fall/winter/summer).
Amount: 1 award of $1,000

Bill Taylor Memorial Scholarship [I0280]

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.

Donor(s): AMF Canada Ltd.
Qualification(s): Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or intercollegiate athletics.
Amount: 1 award of $900

Braintrust Business Scholarships [I0827]

Named in honour of Professor Bill Brainthwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15th with a resume and 500-word statement describing why business courses, in addition to their major, will benefit their future career. Shortlisted applicants may be invited for an interview with the LANG Awards Committee. Selection is based on the student who best describes why taking business courses, in addition to their major, will benefit their future career. Students may hold this award only once.

Donor(s): Anonymous
Qualification(s): Students registered in any degree program, with the exception of B.Com., who have successfully completed 1.0 credits towards the Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150 Introduction to Canadian Business or students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON) who have completed 1.0 credits towards the minor.
Amount: 10 5000(payable over 2 semesters)
### Bridge Builder Scholarship [11050]

The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Apply to Student Financial Services by May 15 with a one page letter outlining the volunteer activities that lead to social connections, breaking down barriers, and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people through one or more of the following: Civic engagement by facilitating community engagement, social integration and volunteerism to promote inclusion for immigrant and ethno-cultural communities; Social connections by promoting social connections and employment networking, including programs that reduce barriers and increase support for vulnerable groups; Education and empowerment by promoting intercultural understanding and break down barriers to participation in community life and decision-making. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.

**Donor(s):** Muslim Society of Guelph  
**Qualification(s):** Students registered in any program who, through volunteer activities in the local community, have demonstrated a passion and commitment for building bridges in one or more of the following ways: facilitating social connections; breaking down barriers; and/or furthering intercultural and interfaith understanding to support vulnerable or marginalized people.

**Amount:** 1 award of $1,000

### CEPS-SC Student Leader Scholarship [10938]

Established to recognize the student who demonstrates the most significant contributions to enhancing and promoting the physical and engineering sciences at the University of Guelph, through volunteer leadership roles. Apply to the CPES Awards Committee (cepsada@uoguelph.ca) by May 15 with a one page letter outlining volunteer/leadership contributions and a reference letter indicating what contributions they made to promoting and enhancing physical and engineering sciences.

**Donor(s):** College of Engineering and Physical Sciences Student Council  
**Qualification(s):** Students registered in any program offered by the College of Engineering and Physical Sciences who have completed a minimum of 4.0 credits with demonstrated involvement in college-related volunteer/leadership activities.

**Amount:** 2 awards of $1,000

### CFRU Volunteer Scholarship [10215]

The award is presented to the student who has made the most significant contribution to the operation and goals of CFRU. Apply to Student Financial Services by May 15 with a letter describing the contributions made as a volunteer with CFRU and how those contributions have supported the operation and furthered the goals of CFRU.

**Donor(s):** CFRU Alumni  
**Qualification(s):** Students registered in any program with a minimum cumulative average of 70% who have volunteered at CFRU for at least one year.

**Amount:** 1 award of $1,000

### Chemistry Club Prize for Chemistry Promotion [10495]

Awarded to the student who has made outstanding efforts to promote chemistry within the university or the community. Applicants should submit a one-page summary outlining their efforts to promote the disciplines of chemistry within the university, or the community to the Chair of the Department of Chemistry Undergraduate Awards Committee by February 1st.

**Donor(s):** The Chemistry Club  
**Qualification(s):** Students registered in any degree who are members of the Chemistry Club.

**Amount:** 1 award of $200

### Christina Victoria Kenny Memorial Scholarship [11018]

The award recognizes the late Vikki Kenny’s lifelong love of animals and passion for their well-being. Selection will be based on highest final grade in the course. In the event of a tie, the student with the highest cumulative average will be selected. Students may only receive this award once. Application is not required.

**Donor(s):** Family and Friends of Vikki Kenny  
**Qualification(s):** Students registered in any degree program at the University who have completed a minimum of 4.0 credits including ANSC*1210 Principles of Animal Care and Welfare.

**Amount:** 1 award of $1,000

### Class of 1970 Scholarship [10424]

Established by the Silver Anniversary celebrants to commemorate the 25th anniversary of the University Class of 1970. This award rotates among all six colleges on the main campus. The appropriate College Award Committee selects the candidate each Fall semester and the candidate is announced each October. Application is not required.

**Donor(s):** Class 1970: 25th Reunion Gift  
**Qualification(s):** Outstanding in any degree program who has attained at least an 80% average in two consecutive semesters resulting in placement on the Deans’ Honours List.

**Amount:** 1 award of $1,400

### College of Engineering and Physical Sciences Graduation Prize [C0075]

The winner will be selected in May from all students who have completed the program in the previous twelve months. Application is not required. One award of $1000 and a commemorative plaque.

**Donor(s):** College of Engineering and Physical Sciences  
**Qualification(s):** Students who are graduating in June, or who have graduated in the previous Winter or Fall convocations with the highest cumulative average from an honours program offered by the College of Engineering & Physical Sciences.

**Amount:** 1 award of $1,000, 1 Commemorative plaque

### Collins Barrow Scholarship [10040]

Offered by Collins Barrow, a national firm of Chartered Professional Accountants. Selection will be based on the student who has achieved the highest grade in the course ACCT*3330, Intermediate Financial Accounting, in the past academic year. In the event of a tie, the award will go to the student with the highest cumulative average. Application is not required.

**Donor(s):** Collins Barrow - Wellington Dufferin District  
**Qualification(s):** Students who have successfully completed the course ACCT*3330, Intermediate Accounting.

**Amount:** 1 award of $1,000

### Copernicus Scholarship in Physics [10081]

The awards will be made to the top 3 highest combined averages in PHYS*2240 and PHYS*2330. Application is not required.

**Donor(s):** Alumni & Friends to the Department of Physics  
**Qualification(s):** Students registered in a major offered by the Department of Physics with a minimum 80% average, and who have completed PHYS*2240 and PHYS*2330 in the previous academic semester.

**Amount:** 3 awards of $1,500

### David F. Boyes Apiculture Scholarship [10031]

Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application is not required.

**Donor(s):** The Apiculture Club  
**Qualification(s):** Student registered in the Fall semester who achieves high academic standing in Introductory Apiculture ( ENVB*2210 ) in the previous year, demonstrates an interest in apiculture and who has participated in extracurricular activities.

**Amount:** 1 award of $200

### Deans’ Scholarships [10323]

This award was established by the Board of Governors’ in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application is not required.

**Donor(s):** Board of Governors  
**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.

**Amount:** 150 awards of $2,000
IX. Scholarships and Other Awards, Bachelor of Science in Technology

Dr. Caesar V. Senoff Memorial Scholarship for Excellence in Chemistry [I0517]
The Senoff family and the College of Engineering and Physical Sciences, together with the University of Guelph Faculty Association and friends, have established this scholarship in memory of Dr. Caesar V. Senoff. Dr. Senoff discovered the first dinitrogen complex while completing his PhD at the University of Toronto, opening up a new field of chemistry. A valued member of the University of Guelph faculty from 1968 to 1996, his positive influence continues through his students and colleagues. This scholarship will be given annually to the student with the highest cumulative average. Application is not required.

Donor(s): Senoff family and the College of Engineering and Physical Sciences, together with the University of Guelph Faculty Association and friends
Qualification(s): Students registered in a major offered by the Department of Chemistry who have completed between 7.5 and 9.75 credits and a minimum cumulative average of 80%.
Amount: 1 award of $1,250

Dr. James (Jim) Atkinson Scholarship [I1025]
This award has been created through the generous contributions of many alumni and friends to recognize Dr. James (Jim) Atkinson’s influence at Guelph. As coach for over thirty years on both the men’s and women’s teams, as well as a respected faculty in the department of Animal and Poultry Science, Jim has had an impact on and off the field. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary. Coaches will nominate students to the Athletic Awards Committee.

Donor(s): Alumni and Friends of Dr. James (Jim) Atkinson
Qualification(s): One male rugby player and one female rugby player who is registered in any undergraduate program and who has achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student enrolled in the Ontario Agricultural College.
Amount: 2 awards of $1,000

E.B. MacNaughton Convocation Prize [C0171]
Established by the College of Engineering and Physical Sciences to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application is not required. Students who have graduated from an honours program offered by the College of Engineering & Physical Sciences in the previous fall or winter semesters or will graduate in the upcoming summer semester.

Donor(s): The College of Engineering and Physical Sciences
Qualification(s): The College of Engineering and Physical Sciences nominee for the Winegard Medal.
Amount: 1 award of $1,000

Eggestaff Scholarship [I0397]
In honour of University Professor Emeritus and former Chair of the Department of Physics, Peter A. Eggestaff. Application is not required.

Donor(s): Department of Physics
Qualification(s): Student who has completed 12.5 course credits, is currently registered in one of the majors in Physics and has a high cumulative average (of at least 80%) in the required Physics courses normally taken in Years 2 & 3 of the major.
Amount: 1 award of $750

Emmanuel & Kalliope Salamalekis Scholarship [I0987]
Dr. Tony Vannelli, Dean of the College of Physical & Engineering Science from 2007 to 2016, and his wife, Voula, established this award in honour of Voula’s parents, Emmanuel & Kalliope Salamalekis. Selection will be based on high cumulative average and demonstrated engagement in the community, preferably in a leadership role supported by two letters of reference from individuals who or organizations that have knowledge of and can attest to that experience. Apply to the College of Physical & Engineering Science Awards Committee with a letter of application and two supporting reference letters from individuals or organizations attesting to community engagement experience by May 15th. This award is not tenable with the Michele & Maria Vannelli Scholarship (I0988).

Donor(s): Dr. Anthony Vannelli and Voula Vannelli
Qualification(s): Students registered in any program offered by the College of Physical & Engineering Science who have completed a minimum of 5.0 credits and have demonstrated engagement in the community, preferably in a leadership role.
Amount: 1 award of $1,000

Floyd Roadhouse Prize in Analytical Chemistry [I0247]
Awarded to the student with the highest grade in CHEM*2400 Analytical Chemistry I in the previous calendar year. In the event of a tie, laboratory performance will be considered. Presented in the Winter semester. Application is not required.

Donor(s): Professor F.E.B. Roadhouse, colleagues, students and friends
Qualification(s): Students registered in an honours major program offered by the Department of Chemistry and who have completed CHEM*2400, Analytical Chemistry.
Amount: 1 award of $500

George A. Farley Scholarship [I0099]
Established in memory of George A. Farley, a chemistry graduate of the Class O.A.C. ‘33. This scholarship is presented to the student that demonstrates proficiency and academic achievement as evidenced by work term reports, work term assessments and course grades. Application is not required.

Donor(s): James M. Farley
Qualification(s): Student enrolled in a Co-op program administered by the Department of Chemistry with a cumulative average of at least 80% and who has completed their second work term within the preceding calendar year.
Amount: 1 award of $500

George A. Gray O.A.C. ’51 Varsity Scholarships [I0487]
Established in memory of George Gray, O.A.C. ’51, a Guelph football lineman and a great player of the game. Recipients will be selected based on demonstrated athletic and leadership qualities. Coaches will nominate students to the Athletics Awards Committee. Preference will be given to members of the varsity football team. Application is not required. Awarded in the fall semester.

Donor(s): Mrs. George A. Gray
Qualification(s): In-course student-athlete who is a current member of a varsity team and has achieved a minimum 70% average in the previous academic year.
Amount: 2 awards of $1,250

Governor General’s Medal [C0044]
Established by the Office of the Governor General of Canada. Application is not required.

Donor(s): The Chancellery
Qualification(s): Restricted to those undergraduate students in any degree program who are graduating in June, or who have graduated in the previous two convocations, with the highest cumulative average.
Amount: 2 awards of a Silver medal each

Guelph Soap Company Scholarship [I0288]
Established by the Guelph Soap Company and awarded to the student with the highest grade in BIOC*2580 and two courses in Organic Chemistry (CHEM*3750, 3750, 3760, 4720, 4730). Application is not required.

Donor(s): Tricorp Chemical Specialties
Qualification(s): Students registered in a major offered by the Department of Chemistry who have completed CHEM*3750 or CHEM*3760 during the previous calendar year and completed BIOC*2580.
Amount: 1 award of $1,200

Harry Barrett Memorial Scholarship [I1046]
This award was established through a gift from the estate of Mr. Harry Barrett, a graduate of OAC from 1949. Selection will be based on the highest cumulative average. Apply by May 15th to Student Finance with a written explanation of the planned experiential learning opportunity. If there are no applications by May 15th, the scholarship will be given to the student with the highest grade in ZOO*4920 in the previous Fall offering.

Donor(s): The Estate of Harry Barrett
Qualification(s): Students registered in any program who will be participating in field work related to bird studies. Preference will be given to students interested in research and/or study under the Bird Studies Canada program at their headquarters in Port Rowan, Ontario.
Amount: 1 award of $1,500
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Program</th>
<th>Eligibility</th>
<th>Amount</th>
<th>Donor(s)</th>
<th>Qualification(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highdale Farms Scholarship [I0348]</strong></td>
<td>Bachelor of Science in Technology</td>
<td>Established by Mr. Arthur Spoerri, who has had a professional career as an Economist. The student with the highest program average will be selected for one award and the second recipient will have the highest cumulative average from the listed counties. In the event the student with the highest average is also from the listed counties, the student with the second highest average will be selected. A student cannot hold two Highdale Farm Scholarships at the same time. Application is not required.</td>
<td>$5,000</td>
<td>Arthur Spoerri</td>
<td>Students registered in a program offered by the College of Engineering &amp; Physical Sciences, excluding the Bachelor of Engineering program, who have completed minimum of 4.0 credits but no more than 16.0 credits and achieved at minimum 75% cumulative average. Preference given to students from Ottawa-Carleton, Dundas-Glengarry-Stromont, Grenville, Lanark, Prescott-Russell and Renfrew counties.</td>
</tr>
<tr>
<td><strong>Hypercube Scholar Prize for Excellence in Chemistry [C0527]</strong></td>
<td>Bachelor of Arts in Science</td>
<td>Established to recognize the student graduating with the highest cumulative average in any chemistry program offered by the Department of Chemistry. Application is not required.</td>
<td>2 awards of $5,000</td>
<td>Hypercube Inc.</td>
<td>Students graduating (or have graduated in the fall or winter of the current academic year) from a four-year degree program offered by the Department of Chemistry.</td>
</tr>
<tr>
<td><strong>International Undergraduate Scholarship [I0577]</strong></td>
<td>Bachelor of Science in Technology</td>
<td>Established through a student referendum approved by the undergraduate student body, to recognize international students’ academic merit along with involvement/leadership activities during their enrollment at the University of Guelph. Apply to Student Financial Services, by May 15, with a letter indicating involvement/extracurricular activity since entry to the University. This award can only be held once by the student.</td>
<td>several awards of $3,000</td>
<td>International Student Organization (ISO)</td>
<td>Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.</td>
</tr>
<tr>
<td><strong>J.B. Reynolds Graduation Medal in Physics [C0399]</strong></td>
<td>Bachelor of Science in Technology</td>
<td>This medal is awarded to a graduating student in the Spring semester or the previous Fall or Winter Semesters. Application is not required.</td>
<td>1 award of a Medal</td>
<td>Department of Physics</td>
<td>Student who has completed semester 8 of any of the majors in Physics and who has obtained the highest cumulative average in the required Physics courses of that program, normally taken in semester 5 to 8.</td>
</tr>
<tr>
<td><strong>J.L. Campbell Scholarship [I0479]</strong></td>
<td>Bachelor of Science in Technology</td>
<td>Established in honour of J.L. (Iain) Campbell, former Provost and Vice-President (Academic), of the University of Guelph from 1995 to 2000 and former Dean of the College of Engineering and Physical Sciences from 1987 to 1995. Application is not required.</td>
<td>$2,000</td>
<td>J.L. Campbell</td>
<td>Student who is currently registered in one of the majors in Physics and who has completed at least 12.50 credits, with a high cumulative average (at least 80%) in the required Physics courses normally taken in Year 2 and 3 of the major.</td>
</tr>
<tr>
<td><strong>Jack and Lilian MacDonald Scholarship [E0379]</strong></td>
<td>Bachelor of Science in Technology</td>
<td>Family, friends, and colleagues of Lilian MacDonald and Dr. Jack MacDonald, Vice-President, Academic, of the University of Guelph from 1986 to 1995, have established a scholarship that recognizes their commitment to increasing the accessibility of post-secondary education to Aboriginal learners. In the first instance, the award will be given to an entering student coming from the Six Nations Polytechnic (SNP) and who has received the highest cumulative average in the Native University Program. If there is no entering student in any one year, the scholarship will be awarded to the in-course student who is a graduate of the SNP (or previously, the Grand River Polytechnical Institute) who has the highest cumulative average at the University.</td>
<td>$900</td>
<td>Family, friends, and colleagues of Lilian MacDonald and Dr. Jack MacDonald</td>
<td>Entering students coming from the Six Nations Polytechnic (SNP).</td>
</tr>
<tr>
<td><strong>James L. Hunt Scholarship [I0603]</strong></td>
<td>Bachelor of Science in Technology</td>
<td>Established on honour of Professor Emeritus James L. Hunt, Medal of Merit recipient. The recipient will have achieved the highest cumulative average over 80%. This award cannot be held with any other awards offered by the Department of Physics. Application is not required.</td>
<td>1 award of $2,000</td>
<td>Department of Physics</td>
<td>Students registered in any major offered by the Department of Physics that have completed 10.0 credits and have achieved a minimum 80% cumulative average.</td>
</tr>
<tr>
<td><strong>John Eccles Scholarship [I0093]</strong></td>
<td>Bachelor of Science in Technology</td>
<td>Apply to Student Financial Services, by May 15, with a letter highlighting leadership abilities through participation on residence life. Providing a reference letter would be an asset.</td>
<td>1 award of $1,000</td>
<td>Student Housing Services</td>
<td>Full-time student registered in semester 2, 3, 4, 5 or 6 and living in residence in the Winter semester who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in residence related activities. Residence Life Staff and paid members of Interhall Council and Hall Councils are not eligible.</td>
</tr>
<tr>
<td><strong>Johnson &amp; Johnson Diversity and Inclusion Scholarship in Science [I1107]</strong></td>
<td>Bachelor of Science in Technology</td>
<td>Apply by May 15th to the office of the Associate Dean Academic in the College of Biological Science with two supporting reference letters. Selection will be based on greatest demonstrated leadership to increase advocacy for diversity and inclusion in the community through positions held, extracurricular activities and involvement on campus and in the community as evidenced by two letters of reference. Leadership that increases advocacy for inclusion; creating an environment that is safe, positive, respectful and diverse; recognizes and celebrates the range of social identity groups that comprise the community. Students may hold this award only once.</td>
<td>1 award of $1,000</td>
<td>Johnson &amp; Johnson</td>
<td>Students who have completed the course Environmental Perspectives and Human Choices ENVS*2070 and who have demonstrated leadership to increase advocacy for diversity and inclusion in the community. Preference will be given to leadership in the Guelph community.</td>
</tr>
<tr>
<td><strong>Kenneth W. Hammond Scholarship [I0045]</strong></td>
<td>Bachelor of Science in Technology</td>
<td>Student with the highest grade in the course ENVS*2070 &quot;Environmental Perspectives and Human Choices.&quot; Application is not required.</td>
<td>1 award of $1,000</td>
<td>Kenneth W. Hammond</td>
<td>Students who have completed the course Environmental Perspectives and Human Choices ENVS*2070.</td>
</tr>
<tr>
<td><strong>Kevin Durie Memorial Scholarship [I0653]</strong></td>
<td>Bachelor of Science in Technology</td>
<td>Established in memory of Kevin Durie, BA ’93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.</td>
<td>2 awards of $1,000</td>
<td>Christine Blake-Durie</td>
<td>Students who are registered in any degree program on the University of Guelph campus, are a member of Residence Life staff and are academically eligible to continue as a Residence Assistant or as part of Residence Life staff.</td>
</tr>
<tr>
<td><strong>Kip Hunter Prize [I0139]</strong></td>
<td>Bachelor of Science in Technology</td>
<td>For the best essay, written by an undergraduate in a philosophy course. The essay may be either a required assignment for a course (in which case either the student or the instructor may submit it) or it may be specially prepared for the competition. Submission of essays is to the Chair, Department of Philosophy, by May 1</td>
<td>1 Book prize</td>
<td>Faculty, students and staff of the Philosophy Department</td>
<td>Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.</td>
</tr>
</tbody>
</table>
Lambda Foundation Scholarship in LBGT Studies [I0591]
This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LBGT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, issues, and opportunities of or about LBGT peoples. Preference will be given to an applicant who is involved in the LBGT community as demonstrated by record of volunteer activities, active civil society memberships, or as attested by a letter of recommendation from a community group, or evidenced by related previous academic pursuits. This scholarship may be awarded to a student only once. Projects must have been completed or research proposals accepted within the past calendar year. Apply to the Dean of Arts by December 15th including the research proposal or completed project, curriculum vitae, and any supporting letters referencing involvement in the LBGT community and/or faculty support.

Donor(s): Lambda Foundation and other donors
Qualification(s): Students enrolled in a program with a thesis, a research essay, independent research project or course work pertaining to lesbian, bisexual, gay and transgendered (LBGT) studies, as broadly defined by the applicant.

Amount: 1 award of $1,000

Lange and Prokipcak Chemistry Scholarship [I0528]
This scholarship was established by Professor Gordon L. Lange, Professor Joe M. Prokipcak, friends and colleagues. Professors Gordon L. Lange and Joe M. Prokipcak were valued members of the chemistry faculty who retired in 2001. Their excellence in teaching was recognized within the university and nationwide, winning them a total of eleven teaching awards. This scholarship will be awarded to the student with the highest average grade in CHEM*1040, 1050 and 2700. Application is not required.

Donor(s): Professor Gordon L. Lange, Professor Joe M. Prokipcak and friends and colleagues
Qualification(s): Student registered in any program offered by C.E.P.S who has completed CHEM*1040, CHEM*1050, CHEM*2700 and have completed a minimum of 10.0 credits up to a maximum of 14.75 credits.

Amount: 1 award of $1,000

Leonard Conolly Exchange Student Scholarship [I0446]
Established by students, faculty, staff and friends to honour Prof. Leonard Conolly, professor of drama, Chair of the Department of Drama, 1981-88, and Associate Vice-President Academic, 1988-1992. Apply to the Centre for International Programs by April 5, for visiting during the subsequent Fall or Winter semesters. Selection, by the Centre for International Programs, will be based on assessment of (a) a one-page submission describing the significance of the student visiting Guelph to the program of study at the partner exchange university (b) two faculty references of one-page each, and (c) consistent high performance in the course work completed, as documented by a transcript of program grades to date, submitted by the home university.

Donor(s): Students, staff, faculty and friends of Dr. Leonard Connolly
Qualification(s): Full-time visiting exchange student, registered at Guelph for at least one semester, from any country in the South (a list of eligible countries specified) and exchange partner universities are available in the Centre for International Programs.

Amount: 1 award of $1,000

Linda S. Allen Memorial Graduation Prize [C0914]
This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medallion, on the occasion of its second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence required to overcome the significant obstacle(s). She was especially supportive of students who had suffered setbacks and were working to get their programs back on track.

Donor(s): Brian Allen, Family, Friends and Colleagues of Linda S. Allen
Qualification(s): Students graduating from any degree program in June or from the previous February or October convocations with a minimum 70% cumulative average.

Amount: 1 award of $1,000

Macleod Scholarship [I0398]
In honour of University Professor Emeritus Innes K. MacKenzie. Not tenable with the McEglish Scholarship. Application is not required.

Donor(s): Department of Physics
Qualification(s): Students who have completed 12.5 course credits and are currently registered in one of the majors in physics. It is given to a student with a high cumulative standing (of at least 80%) in the required physics courses normally taken in Years 2 & 3 of the major.

Amount: 1 award of $1,500

MacNaughton Scholarship [I0422]
Established by Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application is not required.

Donor(s): Earl B. MacNaughton
Qualification(s): Student who has completed semester 5 and is currently registered in one of the majors in Physics and has a high cumulative average (at least 80%) in the required Physics courses normally taken in semesters 3, 4 and 5 of the major.

Amount: 1 award of $1,000

Marion McKenzie Scholarships for Outstanding Achievement in History [I0470]
These prizes have been established in memory of Marion McKenzie (1905-1994), a teacher who had a love of learning and a continuing curiosity about the world both past and present. These are awarded to the top student in each of the required core courses in the History program (HIST*1050, HIST*2450) in the previous academic year. Application is not required.

Donor(s): Dr. James Snell and Mrs. Leslie Snell
Qualification(s): Students who have completed one of the following required core courses in History: HIST*1050 and HIST*2450. The recipient for HIST*1050 must have completed no more than 5.0 credits; the recipient for HIST*2450, no more than 10.0 credits and be in the specialization in History.

Amount: 2 awards of $1,000

McNeil Consumer Healthcare Diversity and Inclusion Scholarship in Science [I0947]
Established to acknowledge students who demonstrate leadership by increasing advocacy for diversity and inclusion in the community. Selection will be based on greatest demonstrated leadership to increase advocacy for diversity and inclusion in the community through positions held, extracurricular activities and involvement on campus and in the community as evidenced by two letters of reference. Leadership that increases advocacy for inclusion; creating an environment that is safe, positive, respectful and diverse; recognizes and celebrates the range of social identity groups that comprise the community. Apply by May 15th to the CBS, Associate Dean Academic Office (cbsda@uoguelph.ca) with two letters of reference. Preference will be given to leadership in the Guelph community. Students may hold this award only once.

Donor(s): McNeil Consumer Healthcare
Qualification(s): Students registered in any program offered by the College of Biological Sciences or the College of Engineering and Physical Sciences with a minimum cumulative average of 80% who have completed 4.0 credits and who have demonstrated leadership to increase advocacy for diversity and inclusion in the community.

Amount: 1 award of $4,000

Michele and Maria Vannelli Scholarship [I0988]
Dr. Tony Vannelli, Dean of the College of Physical & Engineering Science from 2007 to 2016, and his wife, Voula, established this award in honour of Dr. Vannelli’s parents, Michele and Maria Vannelli. Selection will be based on high cumulative average and demonstrated engagement in the community, preferably in a leadership role supported by two letters of reference from individuals who or organizations that have knowledge of and can attest to that experience. Apply to the College of Physical & Engineering Science Awards Committee with a letter of application and two supporting reference letters from individuals or organizations attesting to community engagement experience by May 15th. This award is not tenable with the Emmanuel & Kalliope Salamalekis Scholarship (I0987).

Donor(s): Michele and Maria Vannelli
Qualification(s): Students registered in any program offered by the College of Physical & Engineering Science who have completed a minimum of 5.0 credits and have demonstrated engagement in the community, preferably in a leadership role.

Amount: 1 award of $1,000
**Nathan Max Goldman Choir Scholarships [10774]**

Established in honour of Mr. Goldman, an OAC graduate (1945 and 1947) and former President of the Philharmonia Society at the University of Guelph. The scholarships will support two students who demonstrate outstanding leadership and vision in the Symphonic Choir and/or the Chamber Choir. One award will be available to a student in each choir and will be given to the candidate who best combines high vocal achievement and choral leadership. A vocal audition may be required. In the event that there is more than one suitable candidate, the student who is a majoring in Music will be given preference, and thereafter, the student with the highest cumulative average. No application is required as a recommendation by Choir Director will be made to the SOFAM Awards Committee.

**Donor(s):** Mrs. Anne Goldman and the family of Nathan Max Goldman  
**Qualification(s):** Students registered in any degree program who are currently a member of the University of Guelph Symphonic Choir and/or the Chamber Choir and have been a member of the University of Guelph Choirs for at least two years.  
**Amount:** 2 awards of $1,000

**Nick Westwood Memorial Scholarship in Spectroscopy [10982]**

In recognition of Professor Nick Westwood’s enduring contributions to the field of Molecular Spectroscopy, and his devotion to academic development and achievement at all levels, his family, friends and Department of Chemistry colleagues have established this award to honour his memory. Selection will be based on the highest grade in CHEM*2070 Structure and Spectroscopy. In the event of a tie, the award will go to the student with the highest cumulative average. Application not required.

**Donor(s):** Staff, faculty and friends of the Department of Chemistry  
**Qualification(s):** Students registered in any degree program with a minimum 80% cumulative average who have obtained a minimum of 80% in CHEM*2070 Structure and Spectroscopy.  
**Amount:** 1 award of $1,000

**Priscilla and Stanford Reid Trust Prize [10597]**

Established in honour the first chair of the History Department, Stanford Reid, and his wife, Priscilla Reid to acknowledge the best paper written about the history of Presbyterianism and/or the Reformed tradition. Apply, by April 1, with a copy of the paper and a covering letter including contact information to the Department of History Awards Chair.

**Donor(s):** Priscilla and Stanford Reid Trust Fund  
**Qualification(s):** Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.  
**Amount:** 1 award of $500

**Professional Staff Association Future Leader Scholarship [11132]**

This scholarship is provided to students whose leadership involvement makes a positive impact at the University of Guelph and/or the broader community. Apply by email to awards@uoguelph.ca by May 15 with one letter of reference and a personal statement (max 500 words) outlining the time commitment, impact, and types of activities undertaken as well as an indication of how these activities were a valuable and rewarding leadership experience. Applicants must also submit the name of their immediate family member for verification that they are part of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. Selection will be based on the student’s demonstrated involvement in leadership activities on campus or off campus that result in positive community impact. The selection committee will consider how the student’s participation, initiative and efforts positively impacts the University of Guelph community and/or their broader community. In the event of a tie, the student with the highest cumulative average will be awarded. This award may not be held more than once.

**Donor(s):** The Professional Staff Association (PSA)  
**Qualification(s):** Students registered in any program who demonstrate involvement in leadership opportunities that result in positive community impact, and who are from the immediate family of full-time, part-time, contractual or retired members of the Professional/Managerial Group at the University of Guelph. Preference will be given to a student that has not received the Professional Staff Association Scholarship in the same year.  
**Amount:** 1 award of $1,500

**Professional Staff Association Scholarship [10628]**

This scholarship is provided to students with the highest cumulative average. Apply to Student Financial Services by May 15 by sending an email to awards@uoguelph.ca and include the name of the family member of the Professional/Managerial Group of the University, and/or retired Professional/Managerial Group of the University of Guelph. This award may be held more than once, however, not in consecutive years. Preference will be given to students of current or retired P.S.A. members. Selection will be based on highest cumulative average.

**Donor(s):** Professional Staff Association  
**Qualification(s):** Full-time students who are from the immediate family, part-time or contractual Professional/Managerial Group employees of the University, and/or retired Professional/Managerial Group of the University of Guelph who have completed at least 5.0 credits and have a minimum 70% cumulative average.  
**Amount:** 1 award of $1,500

**Project Hero Scholarship [10979]**

The University of Guelph is proud to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted.

This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph  
**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.  
**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

**R.C. Moffatt Memorial Scholarship in Physics [10535]**

This scholarship is awarded in even numbered fiscal years (May to April) to the student with the highest cumulative average over 80%. This award is not tenable with any other Department of Physics scholarships. Application is not required.

**Donor(s):** Estate of Professor R.C. Moffatt  
**Qualification(s):** Student who have completed a minimum of 10.0 credits up to a maximum of 19.75 credits and is enrolled in a physics major.  
**Amount:** 1 award of $1,500

**Resilience Scholarship (CEPS) [11226]**

Apply by January 31st to the School of Engineering Awards Committee with a resume and a 500-word statement describing how the applicant has overcome adversity, demonstrated resilience, leadership and perseverance, and how their actions have had a positive impact on others. Selection will be based on: 1. Resilience in response to personal life challenges or adversity (e.g. physical disability, financial constraints, socio-economic barriers); 2. Effective leadership, as evidenced through positions held, extracurricular activities, involvement on campus/in school and/or in the community; 3. Positive impact on others, the School of Engineering, the University of Guelph, or the broader community, as evidenced in a 500-word statement. In the event of a tie the student with the highest cumulative average will be selected. Award cannot be held more than once.

**Donor(s):** The Angel Gabriel Foundation  
**Qualification(s):** Female students registered in any program within the School of Engineering, who have assumed roles of leadership and who have demonstrated resilience in response to personal life challenges or adversity (e.g. physical disability, financial constraints, socio-economic barriers).  
**Amount:** 1 award of $5,000
IX. Scholarships and Other Awards, Bachelor of Science in Technology

RWDI Scholarship for Engineering Student Athletes [11135]
Established by Rowan Williams Davies & Irwin Inc. (RWDI), an engineering consulting firm specializing in the science of buildings and structures. The recipient will be selected based upon extraordinary athletic and leadership qualities. No application is necessary.

Donor(s): RWDI

Qualification(s): Current members of any Gryphon varsity team who are registered in any program offered by the School of Engineering and who have achieved a minimum 70% average or equivalent during the previous academic year as a student-athlete. Preference will be given to a student-athlete who has volunteered in the community.

Amount: 1 award of $3,500

Scotiabank Scholarships in Leadership [10834]
Apply to the Department of Management Awards Committee by May 15 with: 1) A 500 word personal statement describing the impact of their leadership practice in a non-profit setting including the benefits both to the student and to the organization; 2) Reference letter(s) from the organization(s) in which the leadership practice took place. In the event of a tie, the award will go to the student with the highest cumulative average. Please submit your application by email to: dom.awards@uoguelph.

Donor(s): Scotiabank

Qualification(s): Students who have completed the Foundations of Leadership course (HROB*2010) and either completed the required 120 hours of leadership practice for the undergraduate Certificate in Leadership in a non-profit setting or are registered in the Leadership and Organizational Management major of the BComm program and have demonstrated exceptional leadership in a non-profit setting.

Amount: 5 awards of $1,000

Society of Chemical Industry Prizes [C0333]
One plaque will be awarded to the Honours Chemistry student with the highest cumulative average and one plaque will be awarded to the student with the highest cumulative average in either the Biological Chemistry or the Applied Pharmaceutical Chemistry Honours programs. Application is not required.

Donor(s): Society of Chemical Industry

Qualification(s): Students who will be convocating in June or who have convocated from the Chemistry or Biological and Pharmaceutical Chemistry majors of the BSc program during the fall or winter semesters of the current academic year with the highest cumulative averages.

Amount: 2 awards of an Engraved plaque

Sports Media and Sports Broadcasting Scholarships [11035]
Apply by May 15th to Student Financial Services by submitting a one page letter outlining sports media or sports broadcasting experience in the past year. Letters can be emailed to awards@uoguelph.ca. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minoring in Media and Cinema Studies and who have the highest GPA.

Donor(s): Rogers Media Inc.

Qualification(s): Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas. To be awarded to an undergraduate student first, then to a graduate student if no undergraduate students apply.

Amount: 2 awards of $2,500

Stephanie Wilken Volunteer Scholarship [10449]
Established by the Wilken family in memory of Stephanie Wilken, BA 1995. Apply to Student Financial Services with letter indicating the kind and extent of volunteer activities at the Wellness Centre by October 1. Selection committee is the Senate Committee on Awards on the recommendation of the Student Wellness Educator at the Wellness Centre.

Donor(s): Bev and Darlene Wilken

Qualification(s): Student registered in any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre.

Amount: 1 award of $1,000

Summerlee Humanitarian Scholarships [10964]
The Summerlee Humanitarian Scholarships are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues of global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a varsity athlete (varsity athletes should self-identify in their letter). While applicants who demonstrate past significant impacts in improving local communities/groups will be considered, preference will be given to applicants with strong previous proven international humanitarian efforts. Recipients must adhere to the University of Guelph’s Safe Travel Policy.

Donor(s): The Angel Gabriel Foundation

Qualification(s): Students registered in any program with no more than 17.0 credits completed who have demonstrated a commitment to humanitarian efforts including but not limited to those affecting refugees, displaced persons, and populations affected by conflict and natural disasters through volunteer positions, prior employment and/or extra-curricular activities; and who wish to expand their humanitarian efforts internationally to either assist or advocate on behalf of these groups and/or participate in a conference dealing with these issues.

Amount: 5 awards of $10,000 ($5,000 in each of the fall and winter semesters), plus an additional up to $4,000 to support travel costs

Susan Travers Memorial Scholarship [10975]
Established by friends, family and colleagues in Alumni Affairs and Development in Memory of Susan Travers. Susan believed in the value of education. She worked for the University of Guelph as a member of Alumni Affairs and Development and in the Department of Business. She not only encouraged her children to pursue post-secondary education, but led by example, pursuing her university degree as a mature student. Preference will be given to students registered in CAHP AND LANG. Selection will be based on highest cumulative average. No application required.

Donor(s): The staff in Alumni Affairs and Development and Friends

Qualification(s): Students who were accepted to the University of Guelph as a “mature student” applicant and who are currently registered in any degree program.

Amount: 1 award of $1,000

Thomas H. Peters Scholarship [10233]
Application is not required.

Donor(s): Friends and associates of Thomas H. Peters

Qualification(s): Student in any academic program of the University who has completed courses in Land Reclamation (e.g. CROP*2280, SOIL*3200), with a minimum 10.0 credits completed. Applicants must have a minimum of 70% cumulative average and have demonstrated an interest and aptitude in the area of crops and land reclamation.

Amount: 1 award of $500

Toronto District Beekeeper’s Association Scholarship [10285]
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application is not required.

Donor(s): Mr. Jack Robinson

Qualification(s): The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.

Amount: 1 award of $500

United Steelworkers Local 4120 Scholarship [10293]
Apply to Student Financial Services by January 31 and provide the name of the USWA member and relationship to the applicant. If there is more than one eligible candidate, the award will go to the one who has attained the highest relative class standing in his or her previous full-time semester.

Donor(s): United Steelworkers LU4120

Qualification(s): Student who is a member or former member, or who is from the immediate family of a member of United Steelworkers LU 4120, and who is entering semester 2, 3, or 4 of a degree or diploma program in the Winter semester with a minimum 70% cumulative average.

Amount: 1 award of $1,000
In-course Scholarships with Financial Need

### University of Guelph Alumni Legacy Scholarship [I0735]

Funded through donations made to the University of Guelph Alumni Memorial Fund in memory of deceased alumni. The recipient will be selected based on academic achievement and volunteer contributions to the University of Guelph community. Apply to Student Financial Services by October 7 with a letter indicating name, degree and year of graduation of alumnus/alumni relative and a resume or summary of leadership and volunteer contributions to the University of Guelph community.

**Donor(s):** Various donors c/o University of Guelph Alumni Association Memorial Fund

**Qualification(s):** Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with both a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumnus/us of the University of Guelph or its founding colleges.

**Amount:** 1 award of $1,000

### University of Guelph Retirees Association Scholarship [I0569]

Established in 2007 to acknowledge in-course student achievement. The student having the highest cumulative average will be selected and in the event of a tie, the student with the highest average in the last two semesters of full-time studies will be chosen. Apply by May 15th to Student Financial Services with a letter indicating name of and relationship to a retiree of the University of Guelph. Recipients cannot hold this scholarship and another scholarship greater than $1,500 at the same time.

**Donor(s):** University of Guelph Retirees Association (U.G.R.A.)

**Qualification(s):** Students with a minimum cumulative average of 75% registered in a degree program who are related to a retiree of the University of Guelph as child, grand child or great grand child who have not held the scholarship before.

**Amount:** 1 award of $1,500

### Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]

The scholarship will be awarded to the student who has demonstrated academic achievement and exemplary leadership. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca a one-page summary demonstrating leadership skills gained through participation in extracurricular activities, both within the university and the broader community. Preference will be given to students who have completed between 3 and 10 credits at the time of application for the award.

**Donor(s):** Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoeven & family

**Qualification(s):** Students registered in any program who have achieved a minimum of 80% cumulative average and participated in extra-curricular activities.

**Amount:** 1 award of $2,000

### W.C. Winegard Medal [C0311]

The W.C. Winegard Medal is the most prestigious and top convocation award presented to an undergraduate student at the University of Guelph. Named for former University President Dr. William Winegard, the medal is awarded in recognition of both academic achievement and contributions to the university and community life. One student will be nominated by each College Awards Committee. The Senate Honours and Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application is not required.

**Donor(s):** The Board of Governors of the University

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations who excel both academically and in contributions made to the university and community life.

**Amount:** 1 award of a Gold medal

### W.N. Vaughan Medal [C0299]

A medal may be given annually to a student senator who has high academic standing and who has made a substantial contribution to student life and to the university, particularly through involvement in and commitment to Senate activities. Prospective candidates will be nominated by senators and the medal winner will be chosen by a committee selected by the Senate Bylaws and Membership Committee. The medal will be awarded at June convocation. No application is necessary.

**Donor(s):** Friends of Walter N. Vaughan

**Qualification(s):** Student senator who has high academic standing and who has made a substantial contribution to student life and to the University, particularly through involvement in and commitment to Senate activities.

**Amount:** 1 award of a Medal

### City of Guelph 175th Anniversary Scholarship [I0515]

Established by the City of Guelph and students from business and community leaders, this scholarship was established in 2002. Apply to Student Financial Services by November 1 with a letter describing volunteer activities, one reference letter from an individual familiar with the volunteer and/or community service contributions, and a completed Financial Need Assessment Form (N.A.F.). Students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Donor(s):** The City of Guelph

**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits with a minimum 70.0% cumulative average, demonstrated volunteer leadership on campus and/or in the community and financial need. Applicants must be graduates of a City of Guelph high school and be Canadian citizens or permanent residents at the time of application.

**Amount:** 1 award of $2,000

### C.E.P.S. Dean's Scholarship - ACCESS [I4527]

Established by the College of Engineering & Physical Sciences with matching funding through the Ontario Student Opportunities Trust Fund. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. This award may be held only once. ACCESS AWARDS.

**Donor(s):** Established by a number of industrial, commercial and public sector corporations with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with demonstrated financial need registered in an honours program offered by the College of Engineering & Physical Sciences who have completed a minimum of 4.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,000

### In-course Scholarships with Financial Need

**Brian Kenneth Howard Memorial Scholarship [I4548]**

Established by Kenneth and Irene Howard in memory of their son, Brian Kenneth Howard. Awarded to a student assessed as having financial need with a preference given to students from York, Durham or Simcoe counties. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Kenneth and Irene Howard

**Qualification(s):** Student registered in any degree program with a minimum 75.0% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** 1 award of $3,000

### CEPS Computer Science ACCESS Scholarships [I4551]

Established with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** School of Computer Science, friends and alumni and with the aid of the Ontario government’s OSOTF program.

**Qualification(s):** Students registered in an honours program offered by the College of Engineering & Physical Sciences who have completed a minimum of 4.0 credits. Students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,000
IX. Scholarships and Other Awards, Bachelor of Science in Technology

Earl B. MacNaughton C.E.P.S. ACCESS Scholarships [I4172]*

Established by friends, faculty, staff, alumni and students of the University to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical and Engineering Science, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Earl B. MacNaughton with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students currently registered in an honours program in the College Engineering and Physical Sciences with high academic standing, demonstrated financial need, and who have completed a minimum of 15.0 credits. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

**Eleanor Morgan & Bill Archibald Scholarships [I4540]**

The family of Eleanor and Bill Archibald, with the assistance of the Ontario government’s OSOTF program, provide this scholarship in memory of their parents. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining community involvement to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** The Family of Eleanor & Bill Archibald with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in any program with a minimum of 5.0 credits who have cumulative 70% average, has demonstrated community involvement, and financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (See General Statements on Awards).

**Amount:** 1 award of $2,500

**Erin Demers Memorial Scholarship [I0406]**

The family and friends of Erin Demers, a first-year student at the University of Guelph who was tragically killed in a car accident in 1996, have established this scholarship in her memory. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.) and one supporting reference letter from a Residence Assistant, Residence Manager, or Residence Officer.

**Donor(s):** Family and friends of Erin Katrina Demers

**Qualification(s):** Students who have resided in an on-campus residence during their first year who have completed a minimum of 5.0 credits and who have a minimum 70% cumulative average. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

**Amount:** 1 award of $1,800

**Euclid-Hitachi Scholarships [I4517]**

Established by Euclid-Hitachi of Canada Ltd., with the assistance of the Ontario government’s OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.

**Donor(s):** Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

**Graham, Fraser and Trevor Bosch Scholarships in Chemistry [I4288]**

Established by Mr. Martin Bosch of the Guelph Soap Company, with the assistance of the Ontario government’s OSOTF program. Of the recipients with demonstrated financial need, preference will be given to Year 3 students with the highest cumulative averages in at least three 2000 level chemistry courses taken in Year 2. In the event that there are no qualified candidates in Year 3, students in Year 4 will be considered, based on demonstrated financial need and the highest cumulative averages in at least three 2000 level chemistry courses taken in Year 3. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Mr. Martin Bosch of the Guelph Soap Company with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students that have completed between 10.0 and 14.75 credits of an honours major program offered by the Department of Chemistry with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,200

**Guelph Campus Co-operative Centennial Scholarship [I0867]**

In recognition of the Guelph Campus Co-operative’s centennial anniversary and the students who founded it, this scholarship is awarded to a student who has demonstrated financial need. Preference will be given to students who are members of the Guelph Campus Co-operative. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form and a photocopy of your valid co-operative membership card.

**Donor(s):** Guelph Campus Co-operative

**Qualification(s):** Students registered in any program at the University of Guelph who have completed a minimum of 5.0 credits with a minimum cumulative average of 75% and have demonstrated financial need.

**Amount:** 1 award of $1,000

**MacNaughton ACCESS Scholarship in Physics [I4523]**

Established by Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science, and faculty, staff and alumni of the Department of Physics, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Earl B. MacNaughton and faculty, staff and alumni of the Department of Physics with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with demonstrated financial need who are in second year or beyond of a major physics program with a minimum cumulative average of 80%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 5 awards of $1,000

**Residence Life Staff Scholarship [I0697]**

Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date.

**Donor(s):** Student Housing Services

**Qualification(s):** Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program.

**Amount:** 2 awards of $500

---

*General Statements on Awards*
### Returning Student Residence Scholarship [I0696]
Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must have resided in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award.

**Donor(s):** Student Housing Services  
**Qualification(s):** Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average.

**Amount:** 3 awards of $500

### Tara Lynn Giuliani Memorial Scholarship [I0375]
Funded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form. Selection is based on financial need.

**Donor(s):** Tara Lynn Giuliani Foundation at the Hamilton Community Foundation  
**Qualification(s):** Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services and who have demonstrated financial need. Preference given to students with a visual impairment.

**Amount:** 1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000

### William & Nona Heslip Scholarship [I0589]
Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7. Recipients of this award can have this award renewed for up to 3 years provided they continue to demonstrate financial need and maintain a minimum 70% cumulative average of full-time (minimum 80% of a full course load) study. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** The William and Nona Heslip Foundation  
**Qualification(s):** Students that have completed 4.0 credits but no more than 6.0 credits in any degree program; are a Canadian citizen/permanent resident; have a minimum 70% cumulative average; and demonstrate financial need.

**Amount:** 2 awards of $15,000

### In-course Bursaries

#### Acer Saccharum Bursary [I3083]
Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and confirmation of registration with Student Accessibility Services.

**Donor(s):** Steven Ardown and Celine Batterink  
**Qualification(s):** Students registered in any degree program at the University of Guelph, who have demonstrated financial need and are registered with Student Accessibility Services.

**Amount:** 1 award of $1,000

#### Brinson Partners Inc. Bursaries [I3526]
Brinson Partners Inc., with the assistance of the Ontario government’s OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** Brinson Partners Inc. with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

#### Burnbrae Farms Bursaries [I3525]
Established by Burnbrae Farms, with the assistance of the Ontario government’s OSOTF program to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement explaining interests in poultry science to Student Financial Services by October 7.

**Donor(s):** Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,000

#### Campbell-Ouellette Family Bursary [I3098]
Established by the Campbell-Ouellette family who are passionate about supporting students with financial need. In keeping with the family’s broad academic interests, preference will be given to students registered in the Bachelor of Arts and Science Program. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Dr. Malcolm Campbell  
**Qualification(s):** Students registered in any program with demonstrated financial need.

**Amount:** 1 award of $2,000

#### Class of ‘72: 25th Reunion Bursaries [I3512]
Established by the Class of ‘72: 25th Reunion Fund with the assistance of the Ontario government’s OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Class of ‘72: 25th Reunion Fund with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 awards of $1,000

#### David Havoic Bursary [I3087]
Established by the Havoic family, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to the student with the greatest financial need. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and attach a letter from Student Accessibility Services confirming registration and physical disability.

**Donor(s):** Debbie and David Havoic  
**Qualification(s):** Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.

**Amount:** 1 award of $1,000

#### David R. Leach Memorial Bursary [I3534]
Provided in memory of David R. Leach by his family, with the assistance of the Ontario government’s OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. ‘73 and graduated with a B.Sc. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7.

**Donor(s):** Mrs Deborah Leach-Sartor with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students who are physically disabled as determined by the Student Accessibility Services with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $1,000

#### Denis and Patricia Yates Bursary [I3097]
Established by Charlotte Yates in memory of her parents who were strong advocates for the value of education in society. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Dr. Malcolm Campbell  
**Qualification(s):** Students registered in any program with demonstrated financial need.

**Amount:** 1 award of $2,000
### Elizabeth Burton Bursaries [I3503]
Mrs. Elizabeth Burton, with the assistance of the Ontario government’s OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

### Gryphon Investment Council Bursaries [I3513]
Established by Gryphon Investment Counsel, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

### Guelph Compassionate Health and Dental Bursary [I3061]
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph’s mandatory Student Health Plan, University of Guelph’s Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment form; (2) a letter from physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and its impact on the student’s studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) Insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

**Donor(s):** Student Health and Dental Plan Reserve

**Qualification(s):** Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student’s academic progress.

**Amount:** Several awards of various amounts to a maximum of $1,500

### Guelph Student Assistance ACCESS Bursaries [I3556]
These bursaries have been established and approved by undergraduate students through student referendum with the aid of the Ontario government's OTSS program to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Central Student Association with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Full-time students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

**Amount:** Several awards of varying amounts up to $1,000

### Helen Mahon Memorial Bursary [I3063]
Established in memory of Helen Mahon, a longtime employee of the University of Guelph and who, following the death of her husband, raised three young children alone, all of whom graduated from university. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form and a statement that indicates you meet the criteria of this bursary. Awarded in the winter.

**Donor(s):** Family and Friends of Helen Mahon

**Qualification(s):** Students registered in any program who come from a family where one parent is deceased.

**Amount:** 1 award of $500

### Howard and Myrtle Rogers Bursaries [I3537]
Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** The Estate of Howard and Myrtle Rogers with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate on-going financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 10 up to $2,000

### Indigenous Student Bursary [I3068]
In 2009, the Ministry of Advanced Education and Skills Development established the Indigenous Student Bursary as part of their new Aboriginal post-secondary education funding initiative. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with financing their education. Apply to Student Financial Services by October 7th with a Financial Need Assessment Form and complete the Indigenous Student Bursary application. Selection is based on financial need.

**Donor(s):** Ministry of Advanced Education and Skills Development (MAESD)

**Qualification(s):** Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP) and have demonstrated financial need.

**Amount:** several awards ranging in values from $1,000 to $3,500

### International Emergency Medical Aid Assistance [I3059]
The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an on-going basis.

**Donor(s):** University of Guelph

**Qualification(s):** International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.

**Amount:** Several awards of varying amounts
Irvine and Grace Black Memorial Bursary [I3051]
Established in memory of Irvine and Grace Black, by friends and family to recognize their many contributions to young people. Irvine, a well-known sheep breeder, was a judge at College Royal and the Royal Winter Fair for over fifty years, and Grace was active in the Women’s Institute and the Ferguson Fall Fair. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining involvement in the 4-H Club and/or a Women’s Institute by October 7.

Donor(s): Family and friends of Irvine and Grace Black
Qualification(s): Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to applicants who are, or have been, active in the 4-H Club and/or a Women’s Institute.

Amount: 1 award of $500

Ivey Cook Bursaries [I3076]
Apply to SAS using the "New Student Intake Form" and a letter explaining your situation and attachment showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first come first served basis, based on the validity and need for an assessment.

Donor(s): Suzanne Ivey Cook
Qualification(s): Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment.

Amount: several awards of up to $1,000

John & Margaret Van Loon Family Bursary in Science [I3549]
Established on behalf of the Van Loon Family in honour of parents John & Margaret Van Loon. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

Donor(s): Mr. Paul Van Loon and Mrs. Lauralene Van Loon
Qualification(s): Students registered in any program in the College of Biological Science or the College of Physical & Engineering Science who have completed a minimum of 2.5 credits. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).

Amount: 1 award of $1,500

Madison Gough Memorial Bursary [I3103]
Established by the friends and family of Madison Gough, a gentle, kind spirit who was inspired by nature, animals, or music and passionate about acceptance of difference. Apply by October 7 to Student Financial Services with a Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

Donor(s): Bob Gough and Laura Ladouceur
Qualification(s): Students registered in any program who have demonstrated financial need.

Amount: 1 award of $1,000

Mary L. Whitelock Bursaries [I3824]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Estate of Mary L. Whitelock with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 13 awards of $2,000

Métis Nation of Ontario Bursary [I3092]
The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and a statement confirming Métis status and include your card number.

Donor(s): Métis Nation of Ontario
Qualification(s): Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.

Amount: 1 award of $1,000

Norma Valeriote International Student Bursaries [I3009]
Preference given to a student from a country of focus as defined by CIDA (Canadian International Development Agency). Apply to the International Student Advisor with a completed Financial Need Assessment Form for International Students.

Donor(s): Mrs. Norma L. Valeriote
Qualification(s): International students registered in any degree program who have completed a minimum of 4.0 credits and demonstrated financial need.

Amount: Several of varying amounts

Ontario Co-operatives R.P. Forsawh Bursary [I3013]
The Co-operatives, Credit Unions, friends and associates of Prof. R. P. Forsawh have established this bursary. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7 and a letter indicating membership of co-op or credit unions.

Donor(s): The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forsawh
Qualification(s): Undergraduate students who have financial need. Preference may be given to candidates who have or are members of a co-operative or credit union.

Amount: 1 award of $400

Ontario First Generation Bursary [I3062]
The Ministry of Advanced Education & Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.

Donor(s): Ministry of Advanced Education & Skills Development (MAESD)
Qualification(s): Students registered in any program who are first generation students, Ontario residents (as defined by OSAP) and who have demonstrated financial need.

Amount: several awards ranging in values from $1,000 to $3,500

Robert Auger Humanitarian Bursary [I3058]
Established in memory of Bob Auger, a former Associate Registrar at the University of Guelph. It is intended as an emergency fund to assist students who unexpectedly find themselves in difficult financial situation who could benefit from receiving a grocery voucher. To be considered, students must have completed a Financial Aid Assessment Form and arrange an appointment with a Financial Aid Counsellor. Appointments can be made by calling 519-824-4120 extension 58715.

Donor(s): Family and friends of Robert Auger
Qualification(s): Students registered in any degree program with an unexpected financial emergency.

Amount: Several grocery vouchers or book vouchers

Ron Scriver Memorial Bursary [I3547]
Established in memory of Mr. Ron Scriver (1946 - 2005) C.E.P.S B.A. ’76, to honour his outstanding 32-year career with the Ontario Universities’ Application Centre and his extensive involvement with colleagues throughout the University system. Preference will be given to students registered in the Bachelor of Computing Science Program. Apply with a Financial Need Assessment Form to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Family and Friends of Ron Scriver with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Students registered in any program offered by C.E.P.S with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 1 award of $2,000

Scotiabank Bursaries [I3532]
Established by Scotiabank, with the assistance of the Ontario government's OSOTF program, to assist students with financial need to continue their studies as full-time students. Distributed in the Winter semester, Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.

Donor(s): Scotiabank with matching funding through the Ontario Student Opportunities Trust Fund
Qualification(s): Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

Amount: 2 awards of $1,500
### Shirley Endean Bursaries [I3570]
These bursaries were created from gifts from multiple donors, with a leading legacy gift from Ms. Shirley Endean, and with the aid of the OTSS matching program. Apply by October 7 to Student Financial Services, with a completed Financial Need Assessment Form. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Estate of Shirley E. Endean & multiple donors with matching funding through the Ontario Trust for Student Support Program  
**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).  
**Amount:** Several awards of varying amounts

### Student Financial Services Bursary [I3107]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.  
**Amount:** Several awards up to a maximum of $6,000

### Uffelmann Connor Family Bursary for Indigenous Students [I3109]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success, particularly for this historically under-represented population. Apply by October 7 to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as Indigenous (First Nations, Métis or Inuit).

**Donor(s):** Maris Uffelmann and Dean Connor  
**Qualification(s):** Students registered in any program who self-identify with First Nations (Status and non-Status), Métis or Inuit ancestry and who demonstrates financial need.  
**Amount:** 1 award of $1,000

### Uffelmann Connor Family First Generation Bursary [I3108]
Established by the Uffelmann Connor family in recognition of the important role that education plays in creating opportunities for future success. Apply by October 7 to Student Financial Services (awards@uoguelph.ca) with a Financial Need Assessment Form and a statement identifying as a first-generation student.

**Donor(s):** Maris Uffelmann and Dean Connor  
**Qualification(s):** Students registered in any program who is a first-generation student (First generation students (parents did not attend post-secondary studies, full-time or part-time, in or outside Canada at any time or in any program) registered in any program with demonstrated financial need.  
**Amount:** 1 award of $1,000

### University of Guelph Access Bursaries [I3522]
Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Alumni and Friend of the University of Guelph with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** Several awards of $500, Several awards of $2,000

### University of Guelph Alumni Association Access Bursaries [I3523]
Established by the University of Guelph Alumni Association, with the assistance of the Ontario government's OSOTF program, to support students who wish to study full-time but who need financial support to do so. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** University of Guelph Alumni Association with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students registered in any degree program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 1 award of $1,250

### University of Guelph International Bursary [I3048]
The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls while registered on campus. Students should apply to the International Student Advisor by Nov. 1 for the fall semester, March 1 for the winter semester, and July 2 for the summer semester with a completed International Student Financial Need Assessment Form (N.A.F.). If students have an emergency situation, please contact the International Student Advisor, in Student Life, University Centre, Level 3.

**Donor(s):** University of Guelph  
**Qualification(s):** International students registered in a degree program who have competed a minimum of 4.0 credits and are registered in a minimum of 1.5 course credits.  
**Amount:** Several varies

### University of Guelph Undergraduate In-Course Bursaries (NON OSAP TSA) [I3047]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.  
**Amount:** Several awards to a maximum of $2,000

### University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]
The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.  
**Amount:** Several awards up to a maximum of $6,000

### University Student Assistance Program [I3057]
These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).  
**Amount:** Several awards of various amounts to a maximum of $1,000

Last Revision: July 4, 2019
### Doctor of Veterinary Medicine

Please refer to the General Statement on Awards for:

- Award Eligibility
- ACCESS Awards Eligibility
- Ontario Student Opportunity Trust Fund (OSOTF) Program
- How Awards are Paid

The University reserves the right to amend awards subject to the availability of funds.

#### Entrances Scholarships

**Dennis Howell Memorial Legacy Scholarship [E2187]**

Established in memory of Dr. Dennis Howell, a former associate dean and dean of the Ontario Veterinary College, a faculty member from 1967 to 1985, and leader in veterinary academia. Dr. Howell’s friends in international business and the veterinary profession, and colleagues in the academic community, have established this scholarship. Selection will be based on significant leadership in veterinary activities while an undergraduate student. Preference will be given to a student whose parent or grandparent is a veterinarian, preferably an alumnus/alumna from the Ontario Veterinary College. Apply by letter highlighting leadership experience while an undergraduate student, a letter of support attesting to the leadership role, and a resume, submitted to the Office of the Associate Dean, Students, OVC in the competition for all OVC in-course awards during the fall semester.

**Donor(s):** Dr. Susan Thompson & Dr. Jane Howell  
**Qualification(s):** Students entering Phase 1 of the DVM program.  
**Amount:** 1 award of $700

**Dr. Norman Harnack Scholarship in Bovine Veterinary Practice [E2202]**

The Dr. Norman Harnack Scholarship in Bovine Veterinary Practice was established by friends and family of Dr. Norman Harnack (OVC ‘85) to recognize the student with the greatest demonstrated leadership and experience related to the bovine industry prior to entering the DVM program. Apply as part of the OVC Awards competition in the fall semester, with a letter from the student detailing their leadership experience in the bovine industry and their vision of how they aspire to give back to the field through their education, accompanied by a letter of recommendation from an impartial bovine industry representative (e.g., producer, veterinarian, association) in support of the student’s qualifications for the award.

**Donor(s):** Paul Hardacre  
**Qualification(s):** Students entering Phase 1 of the DVM Program with a demonstrated interest in bovine study and experience in the bovine industry.  
**Amount:** 1 award of $1,000

**Elaine Harris Memorial Scholarship [E2108]**

Established, in honour, by family and friends of Elaine Harris, who in her short lifetime demonstrated exemplary care and love for all animals. The recipient will be selected on the basis of academic performance in the required courses for the D.V.M. application. Preference will be given to the student who has graduated from a program in Animal Health and/or Veterinary Technology. Application is not required.

**Donor(s):** Shirley and Phil Harris  
**Qualification(s):** Student entering Phase 1 of the D.V.M. program.  
**Amount:** 1 award of $500

**OVC 1964 Entrance Scholarship [E2084]**

Established in honour of OVC 1964’s 50th anniversary. The student with the greatest demonstrated leadership and experience with food animals before entry to the DVM program will be selected. Apply as part of the OVC awards competition in the fall semester with a supporting letter from the community organization.

**Donor(s):** OVC Class of 1964  
**Qualification(s):** Students registered in Phase 1 of the DVM Program with demonstrated leadership in a community organization related to food animals.  
**Amount:** 1 award of $1,000

#### Entrance Scholarships with Financial Need

**Barry Fisher Memorial Entrance Scholarship [E0802]**

The Fisher family has established this award in memory of their son, Barry Fisher, an aspiring veterinarian who tragically passed away in May 2011 at the age of 13, after a long battle with brain cancer. This award is to recognize students with demonstrated financial need who demonstrate consistent, exemplary community volunteer work in support of animal shelter medicine. Apply with a completed Financial Need Assessment Form to Student Financial Services by October 7th and submit a resume with one supporting reference letter indicating involvement in shelter medicine in the Fall during the call for applications from the Dean’s office.

**Donor(s):** Mr. Rael and Mrs. Cheryl Fisher  
**Qualification(s):** Students registered in Phase 1 of the Doctor of Veterinary Medicine Program with demonstrated financial need and volunteer experience in Animal Shelter medicine.  
**Amount:** 1 award of $1,000

**Jennifer Margaret Francis Memorial Bursary [E2000]**

This award is normally made once every four years and may be held by the student throughout the D.V.M. program providing both financial need continues and academic performance is maintained. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Mrs. Jean Francis  
**Qualification(s):** Students from the Region Ottawa-Carleton that entered Phase 1 of the D.V.M. program in the fall semester with demonstrated financial need.  
**Amount:** 1 award of $6,000 (payable over 4 years of study)

#### Entrance Bursaries

**Peter Rich Continuing Bursary [E2123]**

Established in recognition of Peter Rich who graduated from OVC in 1981 and has dedicated his career to the well-being of animals. Continuation of payment is subject to demonstrated satisfactory academic performance. Apply with a completed Financial Need Assessment Form (N.A.F) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. This bursary is not tenable with other major awards exceeding $5,000.

**Donor(s):** The Colwyn and Jean Rich Foundation  
**Qualification(s):** Canadian citizens or permanent residents who are full-time students registered in Phase 1 of the DVM program, with demonstrated financial need. Preference will be given to candidates intending to go into large animal practice.  
**Amount:** 1 award of $24,000 (payable in installments of $3,000 each semester)
### In-course Scholarships

#### Auxiliary to Ontario Veterinarians Scholarship [I2076]
- **Endowed by**: The Auxiliary to Ontario Veterinarians, supporting the profession from 1946 to 1990. Application is not required.
- **Donor(s)**: The Auxiliary to Ontario Veterinarians
- **Qualification(s)**: Student who has completed Phase 2 of the D.V.M. program and who has demonstrated the greatest improvement in academic performance between Phases 1 and 2 of the D.V.M. program.
- **Amount**: 1 award of $200

#### Aventix Animal Health Prize in Dentistry [C2149]
- **Provided by**: Aventix Animal Health. Application is not required.
- **Donor(s)**: Aventix Animal Health
- **Qualification(s)**: Student who has successfully completed Phase 4 of the D.V.M. program who has the highest mark in the Dentistry rotation of the course VETM*4610 or VETM*4660 or VETM*4920 (Small Animal Clinics).
- **Amount**: 1 award of $100

#### Aventix Animal Health Prize in Ophthalmology [C2138]
- **Provided by**: Aventix Animal Health. The student who has the highest mark in the Ophthalmology rotation of the course VETM*4610 or VETM*4880 or VETM*4890 (Small Animal Clinics) will be selected. Application is not required.
- **Donor(s)**: Aventix Animal Health
- **Qualification(s)**: Student who has successfully completed Phase 4 of the D.V.M. program.
- **Amount**: 1 award of $1,000

#### BarB Crowe & Don Kuzik Memorial Scholarship [I2155]
- **Established by**: BarB Crowe as a memorial to her beloved husband, Don Kuzik, and their dogs. In recognition of Don's ethic of friendship, encouragement, teamwork and a lifelong love of animals. Application is not required.
- **Donor(s)**: BarB Crowe
- **Qualification(s)**: Student who has completed Phase 3 of the D.V.M. program with a demonstrated exceptional commitment to teamwork and willingness to support classmates and colleagues, as selected by a vote of the Phase 4 class.
- **Amount**: 1 award of $1,000

#### Betty Goldhart Scholarships in Medical Genetics [I2024]
- **Application required.**
- **Donor(s)**: The Estate of Betty Goldhart
- **Qualification(s)**: Students who have completed Phase 1 of the D.V.M. program and received the first and second highest marks in VETM*3390 (Veterinary Medical Genetics).
- **Amount**: 1 award of $75 and 1 award of $100

#### Bill Taylor Memorial Scholarship [I0280]
- **Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by May 15.**
- **Donor(s)**: AMF Canada Ltd.
- **Qualification(s)**: Full-time student who has completed a minimum of 7.5 credits, but no more than 17.5 credits in the Winter term who has a cumulative 80% average or who is in the top 10% of his/her program. The recipient must have demonstrated responsibility and leadership qualities through participation in intramural or intercollegiate athletics.
- **Amount**: 1 award of $900

#### Boehringer Ingelheim Canada Ltd. Prize of Merit in Feline Medicine [C2051]
- **The student who is judged to be the most proficient in their small animal medicine in the course VETM*4610 or VETM*4660 or VETM*4920 Small Animal Clinics) will be selected. Application is not required.**
- **Donor(s)**: Merial Canada Inc.
- **Qualification(s)**: Student who has successfully completed Phase 4 of the D.V.M. program.
- **Amount**: 1 award of $500

---

### IX. Scholarships and Other Awards, Doctor of Veterinary Medicine

#### Animal House Call Centre Scholarship [I1020]
- **Generously donated by**: the former employees of the Alumni House Call Centre. Students registered in any degree program at the University of Guelph who have been an employee of the Alumni House Call Centre. Application is not required.
- **Amount**: 1 award of $1,500 and a certificate

#### Andrea Nott Memorial Scholarship [I2158]
- **Established by**: Rose McBride. The student who has demonstrated consistent kindness and care above the normal expectation, in the treatment of animals during their Small Animal Medicine, surgery and emergency/critical care faculty supervising clinical rotations will be selected. Application is not required.
- **Donor(s)**: Mrs. Rose McBride
- **Qualification(s)**: Students who have completed Phase 4 of the D.V.M. program and received the first and second highest marks in VETM*3390 (Veterinary Medical Genetics).
- **Amount**: 1 award of $1,750

#### Andrea Leslie MacNab Prize [C2031]
- **Presented by**: the O.V.C. Alumni Association. Application is not required.
- **Donor(s)**: American Board of Veterinary Public Health
- **Qualification(s)**: Student who has successfully completed Phase 4 of the D.V.M. program with the highest mark in veterinary public health in VETM*4620 VETM*4680 VETM*4940 or VETM*4720 (Health Management).
- **Amount**: 1 award of $200

#### Andrew Smith Memorial Medal [C2060]
- **Presented by**: O.V.C. in memory of the late Andrew Smith, founder of the Ontario Veterinary College. Application is not required.
- **Donor(s)**: Friends and family of Andrew Smith
- **Qualification(s)**: D.V.M. student who has successfully completed Phase 4 with the highest program average at the end of Phase 4. The student's entire college career will be considered.
- **Amount**: 1 Medal

---

Last Revision: July 4, 2019
Boehringer Ingelheim Canada Ltd. Scholarship for Excellence in the Principle of Disease (Vet Medicine) [I2052]
Selection will be based on the highest standing in the course VETM*3450 Principles of Disease in Veterinary Medicine. In the event that the highest grade is shared by two or more students, the award shall be awarded to the student with the highest overall phase 2 average. Application is not required.
**Donor(s):** Merial Canada Inc.
**Qualification(s):** Students who have completed Phase 2 of the D.V.M. program.
**Amount:** 1 award of $1,000

Braithwaite Business Scholarships [I0827]
Named in honour of Professor Bill Braithwaite, a retired faculty member who taught business courses at the University of Guelph for 50 years. Students should apply to the LANG Awards Committee by May 15th with a resume and 500-word statement describing why business courses, in addition to their major, will benefit their future career. Students may hold this award only once.
**Donor(s):** Anonymous
**Qualification(s):** Students registered in any degree program, with the exception of B.Comm., who have successfully completed 1.0 credits towards the Gordon S. Lang School of Business and Economics Certificate in Business including MGMT*2150 Introduction to Canadian Business or students registered in a business-related minor, including Business Administration (BADM), Business (BUS), Business Economics (BECN), Marketing Management (MKMN) and Economics (ECON), who have completed 1.0 credits towards the minor.
**Amount:** 10 5000 (payable over 2 semesters)

Bridge Builder Scholarship [I1050]
The Muslim Society of Guelph has established this award to recognize a student who demonstrates a passion and commitment for building bridges in the local community. Application is not required. The recipient will be selected on the basis of academic achievement and dedication to the community. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.
**Donor(s):** Muslim Society of Guelph
**Qualification(s):** Students registered in any program who, through volunteer activities in the local community, have demonstrated a passion and commitment for building bridges in one or more of the following ways: facilitating community engagement, social integration and volunteerism to promote inclusion for immigrant and ethno-cultural communities; Social connections by promoting social connections and employment networking, including programs that reduce barriers and increase support for vulnerable groups; Education and empowerment by promoting intercultural understanding and break down barriers to participation in community life and decision-making. Selection will be based on the most significant impact made in building bridges in the local community as demonstrated through volunteer activities.
**Amount:** 1 award of $1,000

CALAM/ACMAL Prize [I2078]
Established by the Canadian Association for Laboratory Animal Medicine/L'Association Canadienne de la Medecine des Animaux de Laboratoire (CALAM/ACMAL). The winning report will be selected on the basis of scientific content, relevance to the field of laboratory animal science and quality of the manuscript. The case report may be written in either English or French, and must be in a format suitable for publication in the Canadian Veterinary Journal. Submit Reports to the O.V.C. Associate Dean's, in the Fall during the call for applications from the Dean's office.
**Donor(s):** Canadian Association for Laboratory Animal Medicine/L’Association Canadienne de la Medecine des Animaux de Laboratoire (CALAM/ACMAL)
**Qualification(s):** Full-time students in Phase 1, 2, or 3 of the D.V.M. program.
**Amount:** 1 plaque, 1 award of $250

Canadian Parrot Symposium’s Prize in Avian Studies [C2130]
Endowed by the Canadian Parrot Symposium for an undergraduate student in the D.V.M. program or a graduate student enrolled in a department at the Ontario Veterinary College. The recipient will be selected on the basis of academic achievement and dedication to the discipline. Application is not required.
**Donor(s):** The Canadian Parrot Symposium
**Qualification(s):** Students registered in the D.V.M. program pursuing studies dealing with companion birds, their welfare and well-being, and the human/companion bird relationship.
**Amount:** 1 award of up to $1,500

Canadian Veterinary Medical Association Prize [C2014]
Established by the Canadian Veterinary Medical Association (CVMA). Application is not required. The recipient will be selected by the final year class on the basis of demonstrated leadership abilities. 
**Donor(s):** Canadian Veterinary Medical Association 
**Qualification(s):** Student who has successfully completed Phase 4 of the D.V.M. program.
**Amount:** 1 award of $1,000

Charles M. Baker Memorial Prize [I2006]
Provided by Dr. J.M. Baker of Meaford in memory of Dr. Charles Baker, O.V.C.’23. Application is not required. 
**Donor(s):** Dr. M. Baker and Mrs. Charles Baker 
**Qualification(s):** Student, with the highest relative class standing in any of the Phases, 1, 2 or 3 of the D.V.M. program. Student must have a minimum of a 70% cumulative average.
**Amount:** 1 award of $200

College of Veterinarians of Ontario Prize [C2080]
Established by the College of Veterinarians of Ontario. Application is not required.
**Donor(s):** College of Veterinarians of Ontario 
**Qualification(s):** Student who has completed Phase 4 of the D.V.M. program and has been active in college or university affairs.
**Amount:** 1 award of $1,000

CVSA 2000 Leadership Prizes [I2148]
Selection will be based on the quality of activities within the CVSA, CVSA-sanctioned club, or Class Council that have benefited DVM students and/or the broader OVC community. Nominations will be invited from DVM students each year. The nominator will provide a one-page description of the nominee’s activities and the nomination must be accompanied by two further letters of support from individuals who are acquainted with the nominee’s contributions in the fall during the call for applications from the Dean’s office. The award may be held only once.
**Donor(s):** Central Veterinary Students Association 
**Qualification(s):** Full-time students in the DVM program with satisfactory academic standing who have held an executive or leadership position in the CVSA, in a CVSA-sanctioned club, or on a Class Council in the past academic year.
**Amount:** 2 awards of $250

Deans’ Scholarships [I0323]
This award was established by the Board of Governors in 1991 to recognize the academic achievements of students. Each college will be provided an allocation of awards in which to determine recipients of this scholarship. Recipients will be notified each fall by their college’s awards chair. Application not required.
**Donor(s):** Board of Governors 
**Qualification(s):** Students registered in any degree program who have completed a minimum of 4.0 credits and have been on the Dean’s Honours List for two consecutive semesters in their previous year of studies as defined by the Fall/Winter/Summer sequence.
**Amount:** 150 awards of $2,000
**Dorothea Daniell-Jenkins Memorial Scholarship [I2107]**
Friends, family and fellow dog fanciers have established a scholarship in memory of Dorothea Daniell-Jenkins, a respected judge and Terrier breeder. Application is not required.

**Donor(s):** Friends and family of Dorothea Daniell-Jenkins

**Qualification(s):** Student who has completed Phase 3 of the D.V.M. program and the externship, who is judged to be the most proficient in small animal medicine and surgery, based on academic performance in Phase 3.

**Amount:** 1 award of $700

---

**Dr. Bob Hayes Memorial Prize [C2186]**
This prize has been created in memory of Dr. Bob Hayes (O.V.C'78), a large animal practitioner, well-respected and highly valued veterinarian in the field of food safety and animal welfare, who held senior positions with the Canadian Food Inspection Agency and Ontario Ministry of Agriculture and Food. This prize has been established by his family to recognize his commitment to veterinary medicine. The prize will be presented based on stated demonstration of involvement in, and knowledge about, food safety issues in veterinary medicine. Apply by letter as part of the application process for all OVC undergraduate awards in the winter including a one to two page letter describing one or more of the following: past involvement in food safety; future plans for involvement in the area; a significant food safety issue that is relevant to large animal veterinary medicine. Students must provide a letter of support from an individual who has supervised their work in this area.

**Donor(s):** The Class of O.V.C.'60, together with family, friends and colleagues of Dr. "Chuck" Roe (O.V.C.'50), a respected faculty member of the Ontario Veterinary College and exemplary humanitarian who has endowed this memorial scholarship. Application is not required.

**Qualification(s):** Students graduating from the Food Animal Stream of the DVM program.

**Amount:** 1 award of $1,000

---

**Dr. Bradley Baker Excellence in Communication Prize [I2167]**
This award recognizes a student who has the highest ranking in select process and exceptional competency of the elements of effective interpersonal communication through active listening, of empathy and compassion to the client, and an understanding of the importance of the client's feelings, emotions and values exhibited in the simulated client laboratories in VETM*3220 – Art of Veterinary Medicine II. Students in each practice group will nominate by ballot, the most appropriate student for the award from their practice group. The resulting nominated students will be ranked on the basis of their performance in the end-of-year Objective Structured Clinical Exam (OSCE). In the event of a tied nomination within a practice group, the veterinarian coach for that group will select the most appropriate nominee of the tied students. Application not required.

**Donor(s):** Dr. David Sutherland

**Qualification(s):** DVM students who have successfully completed the course Art of Veterinary Medicine II, VETM*3220

**Amount:** 1 award of $1,000

---

**Dr. C.K. "Chuck" Roe Memorial Scholarship [I2096]**
The Class of O.V.C. ’60, together with family, friends and colleagues of Dr. “Chuck” Roe (O.V.C.’50), a respected faculty member of the Ontario Veterinary College and exemplary humanitarian who has endowed this memorial scholarship. Application is not required.

**Donor(s):** Mrs Lillian Roe

**Qualification(s):** Student who has completed Phase 3 of the D.V.M. program with the highest grade in the Swine component of VETM*4530 - Health Management III. In the event of a tie, the award will go to the student with the highest cumulative average.

**Amount:** 1 award of $500

---

**Dr. D.J. McLellan Prize [C2035]**
Provided by the estate of Dr. D.J. McLellan (O.V.C.’17). Application is not required.

**Donor(s):** Estate of Dr. and Mrs. David John McLellan

**Qualification(s):** Student who has successfully completed Phase 4 of the D.V.M. program with the highest standing in the courses in which equine contagious diseases are taught: VETM*4450 (Equine Medicine & Surgery), VETM*4930 (Large Animal Clinics) and VETM*4940 (Health Management).

**Amount:** 1 award of $2,000

---

**Dr. Downey West Thompson Scholarship [I2185]**
Established by the donor through an estate gift in memory of her husband, Dr. Downey West Thompson (OVC ’39), who worked for the Animal Health branch of the Canada Department of Agriculture, this scholarship represents their commitment to, and affinity with, the Ontario Veterinary College. Selection will be based on the quality of the application and the relevance of the proposed experiential learning opportunity to the student’s stated learning and career goals. Apply by letter outlining an experiential learning opportunity to be undertaken between the end of Phase 3 and the end of Phase 4 in the fall during the call for applications from the Dean's office and include a resume, transcript and a supporting letter from a faculty mentor.

**Donor(s):** Bequest of Mrs. Ina E. Thompson

**Qualification(s):** Students registered in Phase 3 of the DVM program who will be undertaking an experiential learning opportunity related to public health or food safety between the end of Phase 3 and the end of Phase 4.

**Amount:** 1 award of $2,300

---

**Dr. George Rankin Memorial Equine Scholarship [I2053]**
Established to honour the memory of Dr. George Rankin. Apply to the O.V.C. Awards Committee with a resume and supporting letters documenting your interest and aptitude in equine medicine and surgery in the Fall during the call for applications from the Dean's office.

**Donor(s):** Mrs. George Rankin

**Qualification(s):** Student in the D.V.M. program who is entering Phase 4 (final year), and who has a minimum ‘B’ average.

**Amount:** 1 award of $1,000

---

**Dr. J. Grant Savage (O.V.C. ’48) Memorial Prize [I2140]**
This award has been established by family and friends of Dr. Savage who dedicated his life to the health and welfare of farm animals, thus helping to maintain the fabric of rural life in Maine. Selection will be based on high academic standing (at least A-) in the course VETM*4530 (Advanced Health Management). Preference will be given to students who have shown an interest in ruminant medicine, surgery and health management through participation in related activities. Application is not required.

**Donor(s):** Family and friends of Dr. J. Grant Savage

**Qualification(s):** Full-time students that have completed Phase 3 of the D.V.M. program.

**Amount:** 1 award of $800

---

**Dr. Jack Lange Memorial Prize (C2122)**
Family, friends and colleagues of Dr. Jack Lange (O.V.C.’71) have established this memorial scholarship to recognize his contributions to the equine industry, the mutual respect he shared with his clients, and his zest for life. Application is not required.

**Donor(s):** Family and friends of Dr. Jack Lange, OVC ’71

**Qualification(s):** Student who has successfully completed Phase 4 of the D.V.M. program who has submitted the best case report dealing with an equine clinical condition in the course VETM*4900 (Veterinary Externship).

**Amount:** 1 award of $500

---

**Dr. Jean Rumney Memorial Scholarships [I2098]**
The Hamilton Dog Obedience Club Inc., donates two $1000 scholarships to the name Dr. Jean Rumney (O.V.C. ’39) to students who have completed Phase 2 of the DVM program and who rank first and second in the small animal medicine portion of the courses VETM*3430 (Clinical Medicine I) and VETM*3440 (Clinical Medicine II). No application required.

**Donor(s):** The Hamilton Dog Obedience Club Inc.

**Qualification(s):** Students who have completed Phase 2 of the DVM program.

**Amount:** 2 awards of $1,000

---

**Dr. Jim Bell Prize [C2083]**
In honour of Dr. Jim Bell from Bellbrae Animal Hospital, the Featherston Charitable Foundation has established this award. Based on faculty feedback to the departmental faculty for the OVC awards committee, the 5 students who have demonstrated the most compassion and dedication to their patients during VETM*4470 - Medicine and Surgery of the Dog and Cat will be put to a class vote based on a willingness to mentor others, the ability to work well individually and within a team, self-motivation, and the willingness to accept a challenge. The student with the highest number of votes will receive the award. In the event of a tie, the award will go to the student with the highest standing in Phase 4 of the DVM program.

**Donor(s):** Featherston Charitable Foundation

**Qualification(s):** Students who have successfully completed Phase 4 of the D.V.M. program.

**Amount:** 1 award of $2,500
IX. Scholarships and Other Awards, Doctor of Veterinary Medicine

Dr. Jim Mitchell Prize [C2082]
In honour of Dr. Jim Mitchell from Markdale Veterinary Services, the Featherson Charitable Foundation has established this award. Based on faculty feedback to The Department of Faculty for the OVC Awards Committee, the 5 students who have demonstrated the most compassion and dedication to their patients during VETM*4450 – Equine Medicine and Surgery will be put to a class vote based on a willingness to mentor others, the ability to work well individually and within a team, self-motivation, and the willingness to accept a challenge. The student with the highest number of votes will receive the award. In the event of a tie, the award will go to the student with the highest standing in Phase 4 of the DVM program.

Donor(s): Featherson Charitable Foundation
Qualification(s): Students who are in Equine or Rural Community Practice Stream and have successfully completed Phase 4 of the D.V.M. program.
Amount: 1 award of $2,500

Dr. John Reeve-Newson Emergency Medicine Prize [C2150]
Presented by the Veterinary Emergency Clinic of Toronto in recognition of the exceptional contributions of Dr. John Reeve-Newson who served as chair of the clinic board for over 25 years, and was instrumental in the development and growth of the facility. Application is not required.

Donor(s): The Veterinary Emergency Clinic
Qualification(s): Student completing Phase 4 of the D.V.M. program, who has the highest mark in the Emergency & Critical Care Medicine rotation of the course Small Animal Clinics (VETM*4610 or VETM*4660 or VETM*4920).
Amount: 1 award of $1,000

Dr. Jonathan Bloom (O.V.C.'93) Ambassadorial Prize [C2114]
Jonathan Bloom (O.V.C.'93) and his family have endowed this award. Application is not required.

Donor(s): Dr. and Mrs. Howard Bloom
Qualification(s): Student who has successfully completed Phase 4 of the D.V.M. program and completed an approved elective experience outside the institution during their final year. The recipient will be selected on the basis of the evaluation of performance by the elective host and the manner in which the College and the profession were represented.
Preference will be given to a student who has demonstrated initiative and motivation in a non-traditional elective experience in veterinary medicine.
Amount: 1 award of $400

Dr. Roy S. Moore Memorial Award [I0046]
Family, friends, professional colleagues and associates who care for laboratory animals have donated this award in memory of Dr. Roy S. Moore (O.V.C.'54), a veterinarian who dedicated his career to the promotion of humane laboratory animal care. Nominations and curriculum vitae of the nominees must be sent to the Associate Dean's, Students, O.V.C., in the Fall during the call for applications from the Dean's office.

Donor(s): Mrs. Shirley Moore
Qualification(s): The recipient will be selected from undergraduate students nominated by the supervisors of all animal care facilities under the purview of the University's Animal Care Committee. The criteria for nomination and awarding the prize are outstanding aptitude for, interest in, and humane care of, research and teaching animals while working in the facility for the past academic year.
Amount: 1 award of $350

Dr. Samuel Downing Stirk Memorial Prize [C2066]
Donated by the family of Dr. Samuel Downing Stirk. Application is not required. One award of $250 and a framed picture.

Donor(s): Dr. Gerald D. Stirk
Qualification(s): Student who has successfully completed Phase 4 of the D.V.M. program and judged by the Farm Service Clinicians to have the best diagnostic ability of disease in food animals in the course VETM*4720 (Health Management).
Amount: 1 award of $250

Dr. Shelly A. McErlane Prize in Veterinary Medicine [C2166]
Established by Dr. Paul and Mrs. Rose Wang to recognize the high quality of care received by their cats from Dr. Shelly McErlane (OVC '95). The recipient will be selected based on high academic achievement in the course Small Animal Clinics (VETM*4610) and an interest in feline internal medicine. Preference will be given to those students with a particular interest in research into the treatment of feline kidney disease or feline endocrinopathies. Apply by letter to the OVC Awards Committee by April 15th.

Donor(s): Dr. Paul & Mrs. Rose Wang
Qualification(s): All students having completed Phase 4 of the DVM program.
Amount: 1 award of $1,000

Dr. Tammy Weekes-Lentz Memorial Scholarship [I2195]
The OVC Classes of 2006 and 2004, along with family and friends of the late Tammi Weekes-Lentz have created this award to honour her legacy of changing the world with one small act of kindness at a time and her commitment to her dream of becoming a veterinarian. She was a warm-hearted, compassionate, gentle, and gracious woman who was in her final year of the Doctor of Veterinary Medicine Program at the time of her passing. The recipient of the award will be chosen by a class vote of the Phase 3 and Phase 4 DVM students. No application required.

Donor(s): OVC Classes of 2006 and 2004, and family and friends of Tammi Weekes-Lentz
Qualification(s): DVM student registered in Phase 3 or Phase 4 of the program who demonstrates genuine caring, consideration and generosity to people and animals alike as decided by a class vote of the Phase 3 and Phase 4 DVM students.
Amount: 1 award of $1,000

Dr. W.J. Stinson Prize [C2065]
Provided by the Dr. W. J. Stinson Scholarship Fund Committee. Application is not required.

Donor(s): Dr. W. J. Stinson Scholarship Fund Committee
Qualification(s): Student who has successfully completed Phase 4 of the D.V.M. program and who is the most proficient in bovine reproduction and obstetrics.
Amount: 1 award of $200

Dr. Wendy Parker Prize in Clinical Dermatology, sponsored by Aventix Animal Health [C2158]
Provided by Aventix Animal Health and recognizing the support of retired professor, Dr. Wendy Parker. Application is not required.

Donor(s): Aventix Animal Health
Qualification(s): Student who has successfully completed Phase 4 of the D.V.M. program who has the highest mark in the Dermatology rotation of the course VETM*4610 or VETM*4660 or VETM*4920 (Small Animal Clinics).
Amount: 1 award of $250

Excellence in Veterinarian-Client Relations Prize [C2200]
The Excellence in Veterinarian-Client Relations Prize has been established in recognition of the role that veterinarians play in the life of pet owners and in memory of a special standardoodle named Wizard. It will be presented to a Phase 4 DVM student graduating from the small animal stream who demonstrate excellent client care in their Companion Animal Hospital rotations. No application is necessary.

Donor(s): Elizabeth Boston
Qualification(s): The recipient will be selected based on their demonstration of excellent client care in their Companion Animal Hospital rotations, exhibiting the following but not limited to: effective communication; showing compassion and empathy; going above and beyond to ensure an excellent client experience; and positive client survey feedback results.
Amount: 1 award of $3,000

F.W. Schofield Prize in Pathology [C2059]
Awarded by the Ontario Veterinary College. Department of Pathobiology to honour the memory of Dr. F. W. Schofield (O.V.C.'10), an honourable professional who attended Korea in 1916 to teach bacteriology and hygiene at a mission school, did research through his entire career, and to whom we owe the development and present extensive use of the anticoagulant Coumarin in all phases of medicine. Application is not required.

Donor(s): Dr. F.W. Schofield
Qualification(s): Student completing Phase 4 of the D.V.M. program with the highest ranking in Pathology.
Amount: 1 award of $400

George A. Gray O.A.C. '51 Varsity Scholarships [I0487]
Established in memory of George Gray, O.A.C. ‘51, a Gaelph football lineman and a great player of the game. Recipients will be selected based on demonstrated athletic and leadership qualities. Coaches will nominate students to the Athletics Awards Committee. Preference will be given to members of the varsity football team. Application is not required. Awarded in the fall semester.

Donor(s): Mrs. George A. Gray
Qualification(s): In-course student-athlete who is a current member of a varsity team and has achieved a minimum 70% average in the previous academic year.
Amount: 2 awards of $1,250
Governor General's Medal [C0044]

Established by the Office of the Governor General of Canada. Application is not required.

**Donor(s):** The Chancellery  
**Qualification(s):** Restricted to those undergraduate students in any degree program who are graduating in June, or who have graduated in the previous two convocations, with the highest cumulative average.

**Amount:** 2 awards of a Silver medal each

Grey Bruce Farmers’ Week Prize [C2168]

Established to recognize new veterinarians entering food animal practice in Grey or Bruce Counties. In the case of there being more than one suitable applicant, the award will be given to the graduate completing the course Health Management in either the Mixed or Food Animal streams (VETM*4680 or VETM*4720, respectively) with the highest standing in the Ruminant Health Management rotation. Apply by letter providing proof of employment to the Office of the Associate Dean, Student Affairs, Ontario Veterinary College in the Winter during the call for applications.

**Donor(s):** Grey County Agricultural Services  
**Qualification(s):** Students who have completed Phase 4 of the DVM program at the Ontario Veterinary College who are entering, upon graduation, food animal practice in Grey or Bruce Counties.

**Amount:** 1 award of $1,000

Gus Lagerquist Five “V” Prize [C2183]

In honour of Gus Lagerquist’s 90th birthday, Elizabeth A. Stone, Dean Ontario Veterinary College, announced that the College would be creating the Gus Lagerquist Five “V” Prize, recognizing Gus as a “WWII Veteran who fought for Victory and is Very Valued by the Veterinary profession”. This prize is awarded to a student who is selected by their classmates as the student who has: worked to build class unity and teamwork; focused on helping others rather than him- or herself; has advocated for OVC within the College and externally; best demonstrated business acumen; and the desire and ability to advance the veterinary profession. No application required.

**Donor(s):** Ontario Veterinary College  
**Qualification(s):** Students who have successfully completed Phase 4 of the D.V.M. program.

**Amount:** 1 award of $1,000

Harry Barrett Memorial Scholarship [I1046]

This award was established through a gift from the estate of Mr. Harry Barrett, a graduate of OAC from 1949. Selection will be based on the highest cumulative average. Apply by May 15th to Student Finance with a written explanation of the planned experiential learning opportunity. If there are no applications by May 15th, the scholarship will be given to the student with the highest grade in ZOO*4920 in the previous Fall offering.

**Donor(s):** The Estate of Harry Barrett  
**Qualification(s):** Students registered in any program who will be participating in fieldwork related to bird studies. Preference will be given to students interested in research and/or study under the Bird Studies Canada program at their headquarters in Port Rowan, Ontario.

**Amount:** 1 award of $1,500

Hill’s Buddy Prize [C2151]

Selection will be based on the student who exhibits the greatest interest, knowledge and proficiency in clinically applying nutritional controls to the diagnosis, treatment and management of diseases of pet animals. Application is not required.

**Donor(s):** Hill’s Pet Products Inc.  
**Qualification(s):** Student who has successfully completed Phase 4 of the D.V.M. program.

**Amount:** 1 award of $1,000

Holstein Association of Canada Prize [C2026]

Presented by the Holstein Association of Canada. Application is not required.

**Donor(s):** Holstein Association of Canada  
**Qualification(s):** Student who has successfully completed Phase 4 of the D.V.M. program who has the highest standing in bovine medicine based on VETM*3440 (Clinical Medicine II) and VETM*4870 (Clinical Medicine III), VETM*4710 (Large Animal Clinics) and VETM*4720 (Health Management).

**Amount:** 1 award of $1,000

International Undergraduate Scholarship [I0577]

Established through a student referendum approved by the undergraduate student body, to recognize international students’ academic merit along with involvement/leadership activities during their enrollment at the University of Guelph. Apply to Student Financial Services, by May 15th, with a letter indicating involvement/extracurricular activity since entry to the University. This award can only be held once by the student.

**Donor(s):** International Student Organization (ISO)  
**Qualification(s):** Full-time international undergraduate students (defined as those paying full international student tuition without exemption), who have completed at least 4.0 course credits from the University of Guelph with a minimum cumulative average of 70% and are registered at the time of application.

**Amount:** several at awards of $3,000

J.P.W. Gilman Prize [I2022]

Established by the colleagues and friends of Prof. J.P.W. Gilman, a teacher of Histology at O.V.C. from 1945 to 1975. Application is not required.

**Donor(s):** Friends and colleagues of J.P.W. Gilman  
**Qualification(s):** Student who has completed Phase 1 of the D.V.M. program with the highest grade in the course VETM*3120 Veterinary Histology.

**Amount:** 1 award of $200

James and Marjorie Pinkney Studentship Research Scholarship [I1215]

Established by the colleagues and friends of Kathy Long D.V.M. (O.V.C.’88). Application is not required.

**Donor(s):** The Estate of Kathy Long  
**Qualification(s):** Students who have completed Phase 4 of the Doctor of Veterinary Medicine program and achieved each year’s learning outcomes in the Companion Animal Primary Healthcare program of the Ontario Veterinary College.

**Amount:** 1 award of $1,000

James Marjorie Pinkney Studentship Research Scholarship [I1215]

Established by the colleagues and friends of Kathy Long D.V.M. (O.V.C.’88). Application is not required.

**Donor(s):** The Estate of Kathy Long  
**Qualification(s):** Students who have completed Phase 4 of the Companion Animal Primary Healthcare program of the Ontario Veterinary College.

**Amount:** 1 award of $1,000

Jean MacDougall Primary Healthcare Prize [C0792]

As determined by the Director, veterinarians and staff of the Hill’s Pet Nutrition Primary Healthcare Centre, the recipient will have consistently demonstrated exceptional skills in providing all-encompassing preventative and wellness healthcare to companion animals and their owners as a team member in the Primary Health Care Centre. No application is necessary.

**Donor(s):** The Estate of Jean MacDougall  
**Qualification(s):** Students who have completed Phase 4 of the Doctor of Veterinary Medicine program and achieved each year’s learning outcomes in the Companion Animal Primary Healthcare program of the Ontario Veterinary College.

**Amount:** 1 award of $1,000

Katherine Elizabeth Long D.V.M. Memorial Prize [C2088]

This memorial scholarship was established by the family of Kathy Long D.V.M. (O.V.C.’88). Application is not required.

**Donor(s):** Mr. Doug Long  
**Qualification(s):** Student who has successfully completed Phase 4 of the D.V.M. program who strives most consistently to apply the highest standards of veterinary knowledge and skill while showing concern for the animal’s comfort and welfare. The recipient will be selected by a class vote of the final year class.

**Amount:** 1 award of $500

Kevin Durie Memorial Scholarship [I0653]

Established in memory of Kevin Durie, BA ’93, by his family and friends. Selection will be based on demonstration of outstanding service as a Residence Life staff member and volunteer. Apply by January 15th to the Director, Student Housing Services with a letter of reference from a member of the Residence Life management team and a personal statement of up to 500 words that outlines time commitment and types of volunteer activities undertaken as well as an indication of how their volunteer activities and participation as a Residence Life staff member are valuable and rewarding experiences.

**Donor(s):** Christine Blake-Durie  
**Qualification(s):** Students who are registered in any degree program on the University of Guelph campus, are a member of Residence Life staff and are academically eligible to continue as a Residence Assistant or as part of Residence Life staff.

**Amount:** 2 awards of $1,000

Last Revision: July 4, 2019
<table>
<thead>
<tr>
<th>Award Description</th>
<th>Donor(s)</th>
<th>Qualification(s)</th>
<th>Amount</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kievit Memorial Prize in Surgery [C2027]</td>
<td>OVC ‘66</td>
<td>Student who has completed Phase 4 of the D.V.M. program and is recommended by the instructors in the Department of Clinical Studies on the basis of proficiency in surgery, interest and application in lectures and clinics in surgery.</td>
<td>1 award of $100</td>
<td>Application is not required.</td>
</tr>
<tr>
<td>Leonard Conolly Exchange Student Scholarship [I0446]</td>
<td>established by students, faculty and friends to honour Prof. Leonard Conolly, professor of drama, Chair of the Department of Drama, 1981–88, and Associate Vice-President Academic, 1988–1992. Apply to the Centre for International Programs by April 5, for visiting during the subsequent Fall or Winter semesters. Selection, by the Centre for International Programs, will be based on assessment of (a) a one-page submission describing the significance of the student visiting Guelph to the program of study at the partner exchange university (b) two faculty references of one-page each, and (c) consistent high performance in the course work completed, as documented by a transcript of program grades to date, submitted by the home university.</td>
<td>Students, staff, faculty and friends of Dr. Leonard Connolly</td>
<td>1 award of $1,000</td>
<td></td>
</tr>
<tr>
<td>Linda S. Allen Memorial Graduation Prize [C0914]</td>
<td></td>
<td>This award was established in memory of Linda S. Allen, who served many years as a program counsellor for the BSc program and as an instructor of mathematics and statistics, receiving the Excellence in Undergraduate Academic Advising Medalion, on the occasion of its second awarding in 2005. She worked tirelessly to help countless students, but she was especially supportive of students who had suffered setbacks and were working to get their programs back on track. She was also a wonderful mentor to younger program counsellors. The recipient will be the student who best demonstrates tenacity and persistence in overcoming significant circumstances during their studies. This student will best demonstrate their hard work in overcoming a significant issue and took the necessary steps to get their academic careers on track as evidenced by the fact that they are graduating. If two or more students demonstrate significant circumstances in pursuit of their degree, the student graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).</td>
<td>Brian Allen, Family, Friends and Colleagues of Linda S. Allen</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Major James Rattray Proficiency Prizes [I2054]</td>
<td>Awarded by the College in memory of Major James Rattray. Application is not required.</td>
<td>D.V.M. students completing each of Phases 1, 2, and 3 with the second highest class standings for the Phase.</td>
<td>3 awards of $200</td>
<td></td>
</tr>
<tr>
<td>Mitchell Family Prize [C2086]</td>
<td></td>
<td>This award has been created by the Mitchell family, Dr. Bert Mitchell OAC ’60, OVC ’64, Mary Townsend Mitchell MAC ’60, and sons David and Alan in appreciation of the University. Students will be selected based on their leadership and contributions in the field of public health, toxicology or pathology. Where two students are considered equal, academic performance will be used to determine the recipient. Students must apply in the Convocation Awards competition with a letter that outlines how they have demonstrated their leadership, and contributions in the field of public health, toxicology or pathology, a resumé, and one reference letter from a faculty member or mentor.</td>
<td>Dr. Bert Mitchell and Linda Mitchell</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Molly Carrington (O.V.C.’78) Memorial Prize [C2016]</td>
<td>established by the Class of O.V.C.’78, the Carrington Family and Friends in memory of Dr. Molly Carrington (O.V.C.’78). Application is not required.</td>
<td>Student who has successfully completed Phase 4 of the D.V.M. program and who has demonstrated proficiency in small animal medicine in their Small Animal Clinic rotation (VETM<em>4610 or VETM</em>4660 or VETM*4920) and also demonstrated high standard of care and compassion for his or her patients.</td>
<td>1 award of $925</td>
<td></td>
</tr>
<tr>
<td>Norman W. Simmons Memorial Award [I2124]</td>
<td>established in memory of Norman W. Simmons. Application is not required.</td>
<td>Students graduating from any degree program in June or from the D.V.M. students completing each of Phases 1, 2, and 3 with the second highest class standings for the Phase.</td>
<td>1 award of $1,000</td>
<td></td>
</tr>
<tr>
<td>Nutrience Small Animal Scholarship [I2189]</td>
<td>Established to recognize a student who has consistently displayed exemplary community volunteer work with community-based agencies that support the health of small animals prior to admission to the DVM program. Apply in the fall during the call for applications from the Dean’s Office, OVC awards competition with a letter, including resume and one supporting letter to the Office of the Associate Dean, OVC. Students.</td>
<td>Students graduating with the highest cumulative average over their last four semesters (10 credits) will be chosen. Apply to Student Financial Services by April 1 with a letter of no more than 500 words that summarizes significant obstacles overcome in pursuit of the degree and include a letter of reference from a program counsellor, departmental advisor, instructor or other individual who can speak to the demonstrated tenacity and persistence required to overcome the significant obstacle(s).</td>
<td>Mr. Mark D. Hagen</td>
<td>1 award of $1,000</td>
</tr>
<tr>
<td>Ogilvie Leadership Prize in Food Animals [C2085]</td>
<td>This award has been created by the Ogilvie family who has a strong family history with OVC including Dr. Tim Ogilvie (DVM 1973, MSc 1981, LL.D 2014) and Dr. Adam Ogilvie (DVSc 2014). As well, the Ogilvie family (including Dr. Tim Ogilvie and Dr. Thomas Ogilvie [DVM 2010]) has interests in serving and advancing veterinary medicine for the food animal sector. The award is for a student who best demonstrated their leadership skills in the food animal area while at OVC. Where applications are of equal merit, highest DVM program average will be used to decide the recipient. Students must apply in the Convocation Awards competition with a letter that outlines how they have demonstrated their leadership related to food animal activities at OVC, a resumé, and at least one reference letter from a faculty member or mentor in the food animal field.</td>
<td>Dr. Tim Ogilvie and Mrs. Lola Meek Ogilvie</td>
<td>1 award of $1,000</td>
<td></td>
</tr>
<tr>
<td>Ontario Association of Bovine Practitioners’ Prize [C2093]</td>
<td>Donated by the Ontario Association of Bovine Practitioners. Application is not required.</td>
<td>Student who has successfully completed Phase 4 of the D.V.M. program and who has demonstrated exceptional proficiency in bovine herd health and an interest in bovine practice, based on performance in VETM*4720 (Health Management).</td>
<td>1 award of $1,000</td>
<td></td>
</tr>
<tr>
<td>Ontario Association of Swine Veterinarians’ Prize [I2147]</td>
<td>Presented by the Ontario Association of Swine Practitioners. Apply by letter, stating swine industry experience to date, and include the required essay, to the Associate Dean’s, Students, O.V.C., in the Fall during the call for applications from the Dean’s office. Selection will be based on the best essay submitted describing an issue facing the swine industry.</td>
<td>Student registered in Phase I or Phase II of the D.V.M. program who shows an active interest in pursuing a career in swine health management.</td>
<td>1 award of $1,000</td>
<td></td>
</tr>
<tr>
<td>Ontario Pork Producers’ Marketing Board Prize [C2041]</td>
<td>Donated by the Ontario Pork Producers’ Marketing Board. Application is not required.</td>
<td>Student who has successfully completed Phase 4 of the D.V.M. program and who has demonstrated proficiency in the study of swine diseases, based on performance in the course VETM*4710 (Large Animal Clinics).</td>
<td>1 award of $500</td>
<td></td>
</tr>
</tbody>
</table>
IX. Scholarships and Other Awards, Doctor of Veterinary Medicine

Ontario Veterinary College Class of 2008 Memorial Scholarship [I2169]
Established by the class of O.V.C. 2008 in memory of their classmates Tammi Weekes-Lentz and Daniel Siatkowski as a gesture of their great esteem for them and for their community involvement. Selection will be based on the student veterinarian who best demonstrates a strong commitment to service through involvement with, and contributions to, the community at large. One nominating and one supporting letter must be received in the fall during the call for applications from the Dean’s office.

**Donor(s):** Ontario Veterinary College Class of 2008  
**Qualification(s):** Students who have successfully completed Phase 2 of the D.V.M. program.  
**Amount:** 1 award of $200

OSPCA Veterinary Student Prize [I2146]
Established by the Ontario Society for the Prevention of Cruelty to Animals in recognition of its 100th anniversary. Application is not required.

**Donor(s):** The Ontario Society for the Prevention of Cruelty to Animals  
**Qualification(s):** A student who has successfully completed Phase 3 of the D.V.M. program and has been selected by classmates as showing exceptional compassion toward, and interest, in animals. The recipient must be a resident of Ontario.  
**Amount:** 1 award of a $2,000 Gift Certificate of the University of Guelph bookstore.

OTS Delta Club Scholarship [I2039]
Donated by the OTS Delta Club from the Ontario Veterinary College. Application is not required.

**Donor(s):** Delta Club of Omega Tau Sigma Fraternity  
**Qualification(s):** A student who has completed Phase 3 of the D.V.M. program. The recipient will be chosen on the basis of scholastic achievement and contribution to Club affairs.  
**Amount:** 1 award of $300

Ottawa-Carleton 1983 International Ploughing Match (OVC) Scholarships [I2094]
Selection will be based on involvement in extracurricular activities. Apply by letter to the Office of the Associate Dean, Students in the OVC fall awards competition.

**Donor(s):** Ottawa-Carleton International Ploughing Match Committee 1983  
**Qualification(s):** Students from the City of Ottawa who have been registered in Phase I or II of the D.V.M. program with a minimum cumulative average of 70%.  
**Amount:** 1 award of $1,700

OVC '75 Prize in Memory of Aki Sasage [C2092]
Established by classmates and colleagues of Dr. Aki Sasage (O.V.C. ’75), a new Canadian of exceptional character and sensitivity, with a keen interest in clinical veterinary medicine. Application is not required.

**Donor(s):** The classmates and colleagues of Aki Sasage, OVC ‘75  
**Qualification(s):** Student who has successfully completed Phase 4 of the veterinary program with the highest standing in course VETM*4900 (Veterinary Externship).  
**Amount:** 1 award of $2,000

OVC 1964 Entrance Scholarship [E2084]
Established in honour of OVC 1964’s 50th anniversary. The student with the greatest demonstrated leadership and experience with food animals before entry to the DVM program will be selected. Apply as part of the OVC awards competition in the fall semester with a supporting letter from the community organization.

**Donor(s):** OVC Class of 1964  
**Qualification(s):** Students registered in Phase 1 of the DVM Program with demonstrated leadership in a community organization related to food animals.  
**Amount:** 1 award of $1,000

OVC 1966 Legacy Scholarship [I2198]
In honour of their 50th reunion the class of OVC 1966 decided to commemorate their time at OVC by establishing the OVC 1966 Legacy Award. Students registered in Phase 3 at the Ontario Veterinary College are eligible for this award who have participated in extra-curricular activities and have demonstrated enthusiasm and leadership.

**Donor(s):** The Class of OVC 1966  
**Qualification(s):** Selection is based on a Phase 3 class vote for the student with the greatest demonstrated enthusiasm, class spirit and comradeship, and dedication to school leadership, through participation in extra-curricular activities such as college governance, student clubs, academic conferences and continuing education opportunities.  
**Amount:** 1 award of $2,500

OVC 1986 Memorial Prize [C0953]
The class of OVC 1986 wishes to invest in OVC’s greatest strength- its students - to honour the friends and classmates that they have lost too early. This award was inspired by the tragic death of their classmate Dr. Rob Mason in a mountain biking incident. He was an avid athlete and a brilliant veterinarian who was always ready to help others professionally and socially. The selection criterion is based on a Phase 4 student who has provided the most meaningful mentorship and guidance throughout the first three years of the to the third year class. This student has gone above and beyond and has provided additional advice, leadership and mentorship. The recipient of the award will be decided upon by a vote of the third year class.

**Donor(s):** Class of OVC 1986  
**Qualification(s):** Students who have successfully completed Phase 4 of the DVM program.  
**Amount:** 1 award of $1,000

OVC 2007 Erin Leis (Stewart) Memorial Scholarship [I0843]
The Class of OVC 2007 has established this award in memory of their classmate, Dr. Erin Leis (Stewart), who tragically passed away in February 2012. This scholarship recognizes a student who contributes to student life. Apply in the fall during the call for applications from the Dean’s office with a resume and a letter outlining leadership roles in clubs within OVC and student life.

**Donor(s):** OVC Class of 2007  
**Qualification(s):** Students registered in the DVM program who are active members in any club within OVC and who contribute to student life.  
**Amount:** 1 award of $1,000

OVC Spirit Prize [I0469]
Awarded to one student in Phase 2 and one student in Phase 3 of the DVM program who are elected by their classmates on the basis of their contributions to the OVC community as evidenced by leadership, sportsmanship and ability to involve students in OVC activities. No application required. The Phase 2 and Phase 3 classes will vote as facilitated by the OVC Awards Committee.i0343

**Donor(s):** The Ontario Veterinary College Alumni Association  
**Qualification(s):** Student in Phase 2 and Phase 3 of the DVM program.  
**Amount:** 2 awards of $300

OVMA Animal Behaviour and Welfare Award [I2095]
Presented by the Ontario Veterinary Medical Association. Application is not required. One award of $250 and a plaque

**Donor(s):** Ontario Veterinary Medical Association  
**Qualification(s):** Student who has completed Phase 2 of the D.V.M. program with the highest grade in the animal behaviour component of the course VETM*3410 (Health Management).  
**Amount:** 1 award of $250

OVMA-Erie Herd Health and Population Medicine Prize [C2081]
Presented by the Veterinary Association and the Ontario Veterinary Medical Association. Application is not required.

**Donor(s):** Ontario Veterinary Medical Association  
**Qualification(s):** Student who has successfully completed Phase 4 of the D.V.M. program who has the highest average in VETM*4720 or VETM*4680 (Health Management).  
**Amount:** 1 award of $500

Peter Van der Borch Memorial Entrance Scholarship [I2100]
Established by the estate of Peter Van der Borch, OVC ’88, a fervent feline lover and someone who cared passionately about animal welfare. Selection of the award recipient will be based on the student who demonstrates the greatest leadership in support of feline welfare as reflected in the letter of reference from the non-profit agency with which the student has worked or volunteered, and in the event of a tie between multiple candidates, the award will go to the applicant with the highest admissions average. Apply in the fall DVM awards competition to the OVC Awards Committee, including a cover letter summarizing the student’s involvement in the field, a résumé, and a letter of reference submitted directly to the Office of the Associate Dean, Student Affairs from a non-profit agency with which the student has worked or volunteered.

**Donor(s):** The Estate of Peter Van der Borch  
**Qualification(s):** Students registered in Phase 1 of the DVM program with demonstrated leadership in feline welfare and experience with a non-profit animal-related agency.  
**Amount:** 1 award of $2,500
PetSmart Charities of Canada Scholarship in Shelter Medicine [I2196]

Shelter Medicine is a field of veterinary medicine dedicated to the care of homeless animals in shelters or other facilities dedicated to finding them new homes. In support of their mission to provide lifelong, loving homes for all pets, PetSmart Charities of Canada provides this award. Apply as part of the OVC DVM awards competition in the fall, students submit a resume and written statement (maximum of one page) detailing their experience in shelter medicine, including the number of hours worked or volunteered, and their future career plans, as well as a letter of support submitted directly to the office of the Associate Dean, Students, from a shelter veterinarian with whom they have worked or volunteered. Selection will be based on who demonstrates the most experience in shelter medicine based on the most number of hours spent working or volunteering in this area. In the event of two or more equally ranked candidates, the student with the highest cumulative program average will be selected. The award may only be held once by the same student.

**Donor(s):** PetSmart Charities of Canada

**Qualification(s):** Students registered in Phase 2 or Phase 3 of the DVM program who have worked or volunteered in shelter medicine and who possess a demonstrated interest to pursue a career in Shelter Medicine.

**Amount:** 1 award of $1,000

Project Hero Scholarship [I0979]

The University of Guelph is pleased to participate in Project Hero. Project Hero started in 2009 by Retired General Rick Hillier and Honorary Lt. Colonel Kevin Reed and is a unique program providing undergraduate scholarships to children of fallen soldiers. Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty. “Dependent” children are under the age of 26. The restriction of 25 years does not apply to a physically or mentally disabled child who is over 25 years of age and who had this condition and was a dependent of the employee before the age of 26. Eligibility to participate in this program will be determined by Canadian Armed Forces criteria through confirmation from the Department of National Defense or in the case of First Responders, through the supporting documentation submitted. This award can be held with the University of Guelph Entrance Scholarship, however, students who receive other Entrance Awards (scholarship or bursaries) will have the value of the Project Hero reduced by the value(s) of the other award(s). You can apply for this scholarship by sending an email to awards@uoguelph.ca indicating that you are a dependent child of a member of the Canadian Armed Forces personnel deceased while serving in an active mission and include your parent’s full name OR you are a dependent child of a First Responder personnel deceased during active duty; include supporting documentation confirming the parent perished during active duty as well as confirmation of death. Once approved for this scholarship, you do not need to re-apply.

**Donor(s):** University of Guelph

**Qualification(s):** Canadian citizens/permanent residents entering or registered full-time in any degree program who are dependent children of a member of the Canadian Armed Forces personnel deceased while serving in an active mission or First Responder personnel deceased during active duty.

**Amount:** Several awards that include tuition and fees for up to Bachelor of Arts, plus $8000 toward 1st year living expenses

Robert Walker Memorial Scholarship [I2071]

This award is presented by O.V.C.’78 in memory of their classmate, Robert Walker. Application is not required.

**Donor(s):** OVC ’78

**Qualification(s):** Student who has completed Phase 1 of the D.V.M. program with the highest standing in VETM*3070 (Veterinary Anatomy).

**Amount:** 1 award of $150

Rosemont Scholarship in Food Animal Health and Welfare (OVC) [I2199]

The Rosemont Scholarship in Food Animal Health and Welfare was established with proceeds from the “Excellence in Food” benefit dinner held at the Globe Restaurant in Rosemont, Ontario. The award recognizes the importance of animal health and welfare to rural life and sustainable food systems. Apply by letter detailing interest and involvement in activities related to food animal health and welfare, with two letters of support from veterinarians or faculty who have worked with the student in this area, to the Office of the Associate Dean, Students in the OVC fall awards competition. Selection will be based on the greatest demonstrated interest and involvement in food animal health and welfare. In the instance that more than one candidate is ranked equally by the OVC Awards Committee, the student with the highest cumulative grade in their Health Management courses to date will be awarded the scholarship.

**Donor(s):** Janice O’Born

**Qualification(s):** Students registered in the DVM program who demonstrate interest and involvement in food animal health and welfare.

**Amount:** 1 award of $1,600

Royal Canadian Army Veterinary Corps Prize [I2097]

In 1923, Colonel C.E. Edgett (O.V.C. 1906), donated the funds from the proceeds of the sale of a horse ambulance, donated by the RSPCA for use in World War I, to establish the Royal Canadian Army Veterinary Corps Prize. Applicants must submit a plan for the work/study visit and a letter in the Fall during the call for applications from the Dean’s office.

**Donor(s):** Colonel C.E. Edgett (OVC 1906)

**Qualification(s):** Student who has completed Phase 1 of the D.V.M. program planning a work/study visit to an equine facility during the summer between second and third year. In keeping with the original terms of the award, the care and welfare of horses should be a significant component of the proposal. Selection will be based on the merits of the proposal and academic performance.

**Amount:** 1 award of $350

Royal Canin Companion Animal Nutrition Scholarship [I2192]

This award was created for a full time student in the Doctor of Veterinary Medicine program who has submitted the best case report or article concerning companion animal (canine or feline) nutrition. The report will be selected on the basis of scientific content and merit, relevance to the field and quality of the manuscript. The case report or article must be in a format suitable for publication as a Non-peer-reviewed article in the Canadian Veterinary Journal (Max. 500 words). The award recipient is strongly encouraged to publish their report in the CVJ. Submit reports or articles to the Office of the Associate Dean, Students, as part of the OVC undergraduate awards competition in the fall.

**Donor(s):** Royal Canin Canada

**Qualification(s):** Students registered in the Doctor of Veterinary Medicine Program.

**Amount:** 1 award of $1,000

Small Ruminant Veterinarians of Ontario Prize [U0729]

The Small Ruminant Veterinarians of Ontario have established this $400 award to recognize a graduating DVM student in the food-animal stream (VETM*4710 or rural Community practice stream/VETM*4660). Selection is based on demonstrated clinical competence in small ruminant health management and interest in small ruminant medicine. Recommendation from faculty in the Dept. of Population Medicine will be based on clinical competence and demonstrated aptitude in small ruminant rotations. In case of equally qualified candidates, the student with the highest grade in thier Ruminant Health Management 1 Core Rotation will be the successful recipient.

**Donor(s):** Small Ruminant Veterinarians of Ontario

**Qualification(s):** Students who have successfully completed Phase 4 of the DVM program in the food animal stream (VETM*4710) or rural community practice stream (VETM*4660). No application required.

**Amount:** 1 award of $400

Sports Media and Sports Broadcasting Scholarships [I1035]

Apply by May 15th to Student Financial Services by submitting a one page letter outlining sports media or sports broadcasting experience in the past year. Letters can be emailed to awards@uoguelph.ca. Selection is based on highest cumulative average. If no applications are received preference will be given to a student minoring in Media and Cinema Studies and who have the highest GPA.

**Donor(s):** Rogers Media Inc.

**Qualification(s):** Students registered in any program who have demonstrated experience in sports media and sports broadcasting. Preference to students involved in on campus activities in the sports media and/or sports broadcasting areas. To be awarded to an undergraduate student first, then to a graduate student if no undergraduate students apply.

**Amount:** 2 awards of $2,500

Stephanie Wilken Volunteer Scholarship [I0449]

Established by the Wilken family in memory of Stephanie Wilken, BA 1995. Apply to Student Financial Services with letter indicating the kind and extent of volunteer activities at the Wellness Centre by October 1. Selection committee is the Senate Committee on Awards on the recommendation of the Student Wellness Educator at the Wellness Centre.

**Donor(s):** Bev and Darlene Wilken

**Qualification(s):** Student registered in any undergraduate degree program, who has been a volunteer for at least two semesters at the Wellness Centre. The recipient will be selected on the basis of academic performance in all courses to date and volunteer work at the Wellness Centre.

**Amount:** 1 award of $1,000
IX. Scholarships and Other Awards, Doctor of Veterinary Medicine

Stone Scholarship for Student Veterinarian Exploration [I0951]
In honour of Dr. Elizabeth Arnold Stone’s tenure as the Dean of the Ontario Veterinary College, alumni, staff and friends of OVC have joined together to create this scholarship. The award will be presented to the student who submits the best proposal describing a project to which they have been accepted, which will: require them to use their skills and creativity to explore new ideas, concepts and approaches that will broaden their career horizons; foster collaboration both within and beyond the OVC; and expand the role of veterinarians in society. Preference will be given to the student whose proposal describes a plan for how participating in the project will be communicated to other people within at least two demographic groups (e.g., students, the public, researchers working in the field, government officials, etc.). Applicants must also identify two individuals (faculty, staff or administrator) associated with the project (one from the Ontario Veterinary College and one from elsewhere) associated with the project who will mentor them during the work, and provide a letter from them confirming the applicant’s participation in the project. The work may be conducted during the summer or during the academic year. Apply to the Office of the Associate Dean Students in the fall. The following should be included in the application material: a) A letter describing the proposal, the applicant’s role and how the applicant’s participation in the project will use their skills and creativity to: explore innovative ideas, concepts and approaches that will broaden their career horizons; foster collaborations both within and beyond the OVC; and expand the role of veterinarians in society. The following should be included in the application material: a) A letter describing the proposal, the applicant’s role and how the applicant’s participation in the project will use their skills and creativity to: explore innovative ideas, concepts and approaches that will broaden their career horizons; foster collaborations both within and beyond the OVC; and expand the role of veterinarians in society. b) Identify two individuals (faculty, staff or administrator) associated with the project (one from the Ontario Veterinary College and one from elsewhere) who will be mentors during the work. The mentors must each provide a supporting letter confirming the applicant’s participation and a) A letter describing the proposal, the applicant’s role and how the applicant’s participation in the project will use their skills and creativity to: explore innovative ideas, concepts and approaches that will broaden their career horizons; foster collaborations both within and beyond the OVC; and expand the role of veterinarians in society. Preference will be given to the student whose proposal describes a plan for how participating in the project will be communicated to other people within at least two demographic groups.

Donor(s): Alumni, Staff and Friends of OVC
Qualification(s): Students registered in Phase I or II of the DVM program who have been accepted to participate in a project that will broaden the student veterinarian’s career horizons, foster collaborations both within and beyond the OVC, and expand the role of veterinarians in society.
Amount: 1 award of $1,000

Summerlee Humanitarian Scholarships [I0964]
The Summerlee Humanitarian Scholarships are dedicated in the name of the seventh vice-chancellor of the University of Guelph, Dr. Alastair Summerlee. These scholarships reward students who have significantly engaged in humanitarian issues of global importance and provide them with a further opportunity to continue their work and build connections that lead to lasting change. Interested students should apply by March 1st to Student Financial Services with a letter describing i) how their past activities significantly furthered humanitarian efforts (maximum 500 words) and ii) how they intend to continue to make an impact on a global level (maximum 500 words). The letter must be accompanied by two letters of reference as well as a budget that includes fundraising goals and outlines the cost of their planned international travel and/or conference attendance (if applicable). Five students will be selected based on their ability to demonstrate significant past humanitarian efforts, potential to make further impact based on their proposed international plans (including budget and fundraising goals), and strength of reference letters. Preference will be for one of these awards to go to a student with a strong previous proven international humanitarian efforts. Recipients must contact the University of Guelph’s Safe Travel Policy.

Donor(s): The Angel Gabriel Foundation
Qualification(s): Students registered in any program with no more than 17.0 credits achieved, which will: require them to use their skills and creativity to explore new ideas, concepts and approaches that will broaden their career horizons; foster collaboration both within and beyond the OVC; and expand the role of veterinarians in society.
Amount: 5 awards of $10,000 ($5,000 in each of the fall and winter semesters) plus an additional up to $4,000 to support travel costs.

Summit Veterinary Pharmacy Prize in Clinical Pharmacology [C2179]
This award will be presented to a student who has exhibited superior performance in the field of clinical pharmacology with the highest combined ranking in the course Clinical Pharmacology (VETM*4420) and the anesthesiology rotation in Phase 4. Application is not required. In the event of a tie, the recipient will be chosen based on clinical competency in the anesthesia rotation.

Donor(s): Summit Veterinary Pharmacy Inc.
Qualification(s): DVM students who have successfully completed Phase 4
Amount: 1 award of $1,000

United Steelworkers Local 4120 Scholarship [I0293]
Apply to Student Financial Services by January 31 and provide the name of the USWA member and relationship to the recipient. If there is more than one eligible candidate, the award will go to the one who has attained the highest relative class standing in his or her previous full-time semester.

Donor(s): United Steelworkers LU4120
Qualification(s): Student who is a member or former member, or who is from the immediate family of a member of United Steelworkers LU 4120, and who is entering semester 2, 3, or 4 of a degree or diploma program in the Winter semester with a minimum 70% cumulative average.
Amount: 1 award of $1,000

University of Guelph Alumni Legacy Scholarship [I0735]
Funded through donations made to the University of Guelph Alumni Memorial Fund in memory of deceased alumni. The recipient will be selected based on academic achievement and volunteer contributions to the University of Guelph community. Apply to Student Financial Services by May 15 with a cover letter indicating name, degree and year of graduation of alumnus/alumna relative and a resume or summary of leadership and volunteer contributions to the University of Guelph community.

Donor(s): Various donors c/o University of Guelph Alumni Association Memorial Fund
Qualification(s): Students registered in any degree or associate diploma program at any campus of the University of Guelph who have completed a minimum of one year of full-time studies with both a minimum cumulative average of 75% and demonstrated volunteer leadership, and who are immediate relatives (child, grandchild, great-grandchild, sibling or parent) of an alumnus/us of the University of Guelph or its founding colleges.
Amount: 1 award of $1,000

University of Guelph Retirees Association Scholarship [I0569]
Established in 2007 to acknowledge in-course student achievement. The student having the highest cumulative average will be selected and in the event of a tie, the student with the highest average in the last two semesters of full-time studies will be chosen. Apply by May 15th to Student Financial Services with a letter indicating name of and relationship to a retiree of the University of Guelph. Recipients cannot hold this scholarship and another scholarship greater than $1,500 at the same time.

Donor(s): University of Guelph Retirees Association (U.G.R.A.)
Qualification(s): Students with a minimum cumulative average of 75% registered in a degree program who are related to a retiree of the University of Guelph as child, grandchild or great grandchild who have not held the scholarship before.
Amount: 1 award of $1,500

Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]
The scholarship will be awarded to the student who has demonstrated academic achievement and exemplary leadership. Apply by May 15th to Student Financial Services by emailing awards@uoguelph.ca a one-page summary demonstrating leadership skills gained through participation in extracurricular activities, both within the university and the broader community. Preference will be given to students who have completed between 3 and 10 credits at the time of application for the award.

Donor(s): Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoeven
Qualification(s): Students registered in any program who have achieved a minimum of 80% cumulative average and participated in extra-curricular activities.
Amount: 1 award of $2,000

Veterinary Business Excellence Scholarship [I2173]
Dr. John Tait, on behalf of the Ontario Veterinary Group group of practices, established this award to recognize a student who best demonstrates proficiency and interest in the area of business issues in veterinary medicine. It is given to a student who has demonstrated exceptional competency in the Art of Veterinary Medicine III VETM*4220, including the simulated client interview and their performance in the end-of-year Objective Structured Clinical Exam (OSCE). Apply by letter detailing interest in business activities of the veterinary profession to the Office of the Associate Dean, Students, OVC, in the call for applications in the fall of each year.

Donor(s): Dr. John Tait, Department of Clinical Studies
Qualification(s): DVM students who have successfully completed the course Art of Veterinary Medicine III, VETM*4220
Amount: 1 award of $1,500

Last Revision: July 4, 2019
2019-2020 Undergraduate Calendar
### W.C. Winegard Medal [C0311]
The W.C. Winegard Medal is the most prestigious and top convocation award presented to an undergraduate student at the University of Guelph. Named for former University President Dr. William Winegard, the medal is awarded in recognition of both academic achievement and contributions to the university and community life. One student will be nominated by each College Awards Committee. The Senate Honours and Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application is not required.

**Donor(s):** The Board of Governors' of the University

**Qualification(s):** Students who are graduating in June, or who have graduated in the previous two convocations who excels both academically and in contributions made to the university and community life.

**Amount:** 1 award of a Gold medal

### W.J.R. Fowler Prize [C2021]
Wilfreda Fowler Jackson presents a prize in memory of her father, Dr. W.J.R. Fowler. Application is not required.

**Donor(s):** Wilfreda Fowler Jackson

**Qualification(s):** Student who has successfully completed Phase 4 of the D.V.M. program who is most proficient in large animal medicine and surgery in their Large Animal Clinic rotation (VETM*4670 or VETM*4930 or VETM*4710).

**Amount:** 1 award of $1,750

### W.N. Vaughan Medal [C0299]
A medal may be given annually to a student senator who has high academic standing and who has made a substantial contribution to student life and to the university, particularly through involvement in student government and Senate activities. Prospective candidates will be nominated by senators and the medal winner will be chosen by a committee selected by the Senate Bylaws and Membership Committee. The medal will be awarded at June convocation. Application is not necessary.

**Donor(s):** Friends of Walter N. Vaughan

**Qualification(s):** Student senator who has high academic standing and who has made a substantial contribution to student life and to the University, particularly through involvement in and commitment to Senate activities.

**Amount:** 1 award of a Medal

### Zoetis Large Animal Medicine Prize [C2010]
The recipient will be selected as having demonstrated the greatest proficiency in large animal medicine in their Large Animal Clinic rotation (VETM*4670 or VETM*4930 or VETM*4710). No application is required.

**Donor(s):** Zoetis

**Qualification(s):** Students who have successfully completed Phase 4 of the D.V.M. program.

**Amount:** 1 award of $700

### Zoetis Scholarships [I2181]
The recipients will be selected by his or her classmates on the basis of scholarship and leadership. Application is not required.

**Donor(s):** Zoetis

**Qualification(s):** Students who have completed Phase 2 and Phase 3 of the D.V.M. program.

**Amount:** 2 awards of $600

### Zoetis Small Animal Medicine Prize [C2006]
The recipient will be selected as having demonstrated the greatest proficiency in small animal medicine in their Small Animal Clinic rotation (VETM*4610 or VETM*4660 or VETM*4920). No application is required.

**Donor(s):** Zoetis

**Qualification(s):** Students who have successfully completed Phase 4 of the D.V.M. program.

**Amount:** 1 award of $700

### In-course Scholarships with Financial Need

#### Dr. Richard Zbarsky Memorial Scholarship [I2194]
This award is in memory of Dr. Richard Zbarsky (OVC 1976); a beloved father and veterinarian who owned Etobicoke Veterinary Hospital for over 30 years. He was passionate about small animal medicine, and believed in mentoring others. Dr. Zbarsky dedicated his time to the patients who needed him most. He endeavoured to provide the highest quality of care to all, including those with little financial resources. We offer this award in his honour; so that others may continue his efforts to help those in need. The award will be determined based on the quality of the letter of support from the organization where the student has volunteered. Students must submit a completed Financial Need Assessment Form to Student Financial Services by October 7, and apply by letter of no more than 500 words detailing the quality of the volunteer experience and its impact on companion animal welfare and a letter of support from the non-profit to the Office of the Associate Dean, Students in the OVC fall awards competition.

**Donor(s):** Jeffrey Zbarsky, Pamela Zbarsky, & Kathryn Zbarsky

**Qualification(s):** Student registered in Phases I, II or III of the DVM program with demonstrated financial need, and whose volunteer work relates to the care or well-being of companion animals.

**Amount:** 1 award of $1,500

#### Euclid-Hitachi Scholarships [I4517]
Established by Euclid-Hitachi of Canada Ltd., with the assistance of the Ontario government's OSOTF program, to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD

**Donor(s):** Euclid-Hitachi of Canada Ltd. with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students with a minimum cumulative average of 70% with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

#### Graham Family Incentive Scholarship [I4506]
Provided by Harvey Graham (O.A.C. ‘39) with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD

**Donor(s):** Harvey Graham O.A.C. ‘39 with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students entering the fourth year of a four year degree program, maintaining at least a 70% program average and demonstrating financial need, who have previously received the Harvey Graham Bursary. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $6,000

#### Howard N.B. Dorfman Scholarship [I2520]
Established by the family of the late Howard N.B. Dorfman (O.V.C.’78), with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** The family of the late Howard N.B. Dorfman with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Student in Phase 4 of the D.V.M. program and who has demonstrated the most outstanding achievement in veterinary neurology, based on performance in VETM*4830 (Neurology rotation of the course Small Animal Clinics). Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $250
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Award Details</th>
</tr>
</thead>
</table>
| John B. Walkden and Malcolm T. Bond Prize [12512] | Established by John B. Walkden and Malcolm T. Bond, with the assistance of the Ontario government's OSOTF program. The recipient will have been judged to be proficient in bovine medicine and surgery during the externship, based on the host practitioner's evaluation. Apply with a completed Financial Need Assessment Form (N.A.F.), to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD.  
Donor(s): Estate of John B. Walkden with matching funding through the Ontario Student Opportunities Trust Fund  
Qualification(s): Full-time students in the D.V.M. program who has successfully completed the course Veterinary Externship (VETM*4900). Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
Amount: 1 award of $3,100 |
| Murray Iwasaki Scholarship in Companion Animal Health [12513] | Established by Ms. Caroline Iwasaki, in memory of her brother Murray Iwasaki, O.V.C. '73, with the assistance of the Ontario government's OSOTF program. The recipient will have been judged to be proficient in companion animal medicine and surgery during the externship, based on the host practitioner's evaluation. Apply with a completed Financial Need Assessment Form (N.A.F.), to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Awarded in the Winter semester. ACCESS AWARD  
Donor(s): Ms. Caroline Iwasaki  
Qualification(s): Students registered in the DVM program who have successfully completed the course Veterinary Externship VETM*4900 with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
Amount: 1 award of $3,200 |
| Ontario Veterinary College Alumni Association Trust Scholarship [12180] | Established through the generosity of Ontario Veterinary College Alumni and supporters and in order to encourage philanthropy in future alumni. The award will be given to the student with the highest cumulative average. Apply with a completed Financial Need Assessment Form to Student Financial Services by October 7.  
Donor(s): Ontario Veterinary College Alumni Association  
Qualification(s): Full-time students in Phase 3 or Phase 4 of the DVM program with demonstrated financial need.  
Amount: 2 awards of $1,000 |
| OVC Class of 1977 Memorial Bursary [12510] | The Class of O.V.C. 1977, with the assistance of the Ontario government's OSOTF program, established this scholarship after the tragic and untimely death of their classmate, Brian Mills, as a gesture of their great esteem for him. The Class also wishes that this award honour all their classmates. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services, by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD  
Donor(s): OVC '77 with matching funding through the Ontario Student Opportunities Trust Fund  
Qualification(s): Full-time students in the Phase 2 or Phase 3 of the D.V.M. program with demonstrated financial need are eligible. Selection will be based on financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
Amount: 1 award of $1,000 |
| OVC '59 50th Anniversary Leadership Scholarship [12174] | The class of OVC '59 has established this annual $1,000 scholarship in honour of their 50th anniversary of graduation from the College. Apply by October 7th with a Financial Needs Assessment Form to Student Financial Services. In addition, a letter outlining extra-curricular involvement and highlighting leadership experience while in Phase 1 should be submitted to the Office of the Associate Dean, Students in the OVC fall awards competition.  
Donor(s): The Class of OVC '59  
Qualification(s): Students enrolled in Phase 2 of the DVM program at the Ontario Veterinary College who have demonstrated financial need.  
Amount: 1 award of $1,000 |
| Residence Life Staff Scholarship [10697] | Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Residence Life Staff Scholarship form and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must reside in a Guelph main campus residence for the full year in which they hold this award in order to receive the full award, or one full semester to receive $250 of the award, and are required to submit their residence deposit by the published due date.  
Donor(s): Student Housing Services  
Qualification(s): Students registered in any degree program with a minimum 70% average who have successfully attained a Residence Life Staff position with Student Housing Services and who are receiving OSAP or financial assistance through their provincial/territorial student loan program.  
Amount: 2 awards of $500 |
| Returning Student Residence Scholarship [10696] | Selection will be made on the basis of demonstrated financial need and strong community involvement both inside and outside of residence. Students apply by completing the online Returning Student Residence Scholarship form, submit a one-page summary of community involvement, and submit a letter of support from a Residence Life Staff member or member of Residence Student Government by April 30 to the Director of Student Housing. Recipients must have resided in a Guelph main campus residence for two full semesters to receive the entire $500 award, or one full semester to receive $250 of the award.  
Donor(s): Student Housing Services  
Qualification(s): Students registered in any degree program who plan to reside in residence in second, third or fourth year who are receiving OSAP or financial assistance through their provincial/territorial student loan program and have a minimum 70% average.  
Amount: 3 awards of $500 |
| Tara Lynn Giuliani Memorial Scholarship [10375] | Funded by the Tara Lynn Giuliani Foundation at the Hamilton Community Foundation in memory of Tara Lynn Giuliani, a bright young woman who did not let blindness stand in the way of her studies at the University of Guelph. Apply to Student Financial Services by Oct. 7th with a letter from SAS indicating registration with SAS and/or visual impairment along with a completed Financial Need Assessment Form. Selection is based on financial need.  
Donor(s): Tara Lynn Giuliani Foundation at the Hamilton Community Foundation  
Qualification(s): Students registered in any program who have achieved a minimum of 70% cumulative average, are registered with Student Accessibility Services and who have demonstrated financial need. Preference given to students with a visual impairment.  
Amount: 1 award or more, depending on direction from the donor each year of varying amounts, but not less than $1,000 |
| Walter and Marion MacDougal Scholarship [14530] | Established by the family of Walter and Marian MacDougal on the 50th wedding anniversary of their parents, in recognition of their gift of life-long learning to their five children, with the assistance of the Ontario government's OSOTF program. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter that includes a statement that outlines your interests in food supply, utilization, farmland conservation or woodland management. Preference will be given to students enrolled in a program involved in food supply or utilization, farmland conservation or woodland management. ACCESS AWARD.  
Donor(s): Doug MacDougal, D.V.M. with matching funding through the Ontario Student Opportunities Trust Fund  
Qualification(s): Students demonstrating financial need with a minimum of 10.0 credits and less than 15.0 credits and who are in the following programs/majors/minors: B.A.Sc., B.C.S(Agr), B.Sc(Env), B.Sc(Food Science, Animal Biology, Nutrition, or Forest Science), or D.V.M., having a minimum cumulative average of 70%. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
Amount: 1 award of $2,400 |
## In-course Bursaries

### Acer Saccharum Bursary [I3083]
Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and confirmation of registration with Student Accessibility Services.

**Donor(s):** Steven Ardron and Celine Batterink  
**Qualification(s):** Students registered in any degree program at the University of Guelph, who have demonstrated financial need and are registered with Student Accessibility Services.

**Amount:** 1 award of $1,000

### Allan Cawley Bursary [I2501]
Established by Dr. Allan Cawley, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services, by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD**.

**Donor(s):** Established by Dr. Allan Cawley with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time D.V.M. and graduate students in the Ontario Veterinary College with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 awards of $500

### Anne Howell Memorial Bursary [I3111]
Apply by October 7th with a completed Financial Need Assessment Form (N.A.F.) and a letter indicating that you are from Brantford or Brant County and have attended and graduated from a school in the Grand Erie District School Board or the Brant Haldimand Norfolk Catholic District School Board.

**Donor(s):** Brant Community Foundation  
**Qualification(s):** Students registered in the DVM program with demonstrated financial need. Preference for students from Brantford or Brant County who attended and graduated from a school in the Grand Erie District School Board or the Brant Haldimand Norfolk Catholic District School Board.

**Amount:** up to 5 awards of various amounts

### Auxiliary to Ontario Veterinarians Bursary [I2077]
Endowed by the Auxiliary to Ontario Veterinarians, supporting the profession from 1946 to 1990. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** The Auxiliary to Ontario Veterinarians  
**Qualification(s):** Undergraduate veterinary students who have a record of satisfactory academic performance and who have demonstrated need of financial assistance.

**Amount:** 1 award of $300

### Bill Mactaggart Memorial Scholarship in Small Ruminant Health Management [I2204]
This award is in memory of Bill Mactaggart who lived in Guelph/Eramosa where he raised champion purebred Suffolk sheep with passion and expertise for improving the health and genetics of his show flock. He was a Guelph graduate and an innovator who approached farming using the scientific method. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services, by October 7 and submit a written application (maximum 600 words) detailing experience with small ruminants and how this experience has inspired interest in promoting small ruminant health in the Fall during the call for applications from the Dean's office.

**Donor(s):** Leslie Mactaggart  
**Qualification(s):** DVM students with demonstrated financial need and an interest in promoting the health and welfare of small ruminants are eligible. Selection will be based on the student’s experience with small ruminants, such as handling, showing, rearing, etc., as evidenced through participation in activities such as 4H or agricultural fairs, as well as a recommendation from OVC Ruminant Field Services.

**Amount:** 1 award of $5,000

### Brinson Partners Inc. Bursaries [I3526]
Brinson Partners Inc., with the assistance of the Ontario government's OSOTF program, has established these bursaries. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD**.

**Donor(s):** Brinson Partners Inc. with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,500

### Burnbrae Farms Bursaries [I3525]
Established by Burnbrae Farms, with the assistance of the Ontario government's OSOTF program to assist students with financial need to continue their studies as full-time students. Apply with a completed Financial Need Assessment Form (N.A.F.) and a statement explaining interests in poultry science to Student Financial Services by October 7. **ACCESS AWARD**.

**Donor(s):** Burnbrae Farms with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Preference will be given to students with a demonstrated interest in poultry science. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of $1,000

### Canadian Animal Health Institute Bursary [I2507]
Established by the Canadian Animal Health Institute, with the assistance of the Ontario government's OSOTF program. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD**.

**Donor(s):** Canadian Animal Health Institute with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time student in the D.V.M. program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of $757

### Canadian Kennel Club Bursaries [I2011]
The Canadian Kennel Club provides funds for a limited number of bursaries to assist students in the D.V.M. program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** The Canadian Kennel Club  
**Qualification(s):** Students in the D.V.M. program with demonstrated financial need.

**Amount:** Several varies

### Class of '72: 25th Reunion Bursaries [I3512]
Established by the Class of '72: 25th Reunion Fund with the assistance of the Ontario government's OSOTF program to support students who wish to study full-time. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD**.

**Donor(s):** Class of '72: 25th Reunion with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 awards of $1,000

### Class of OVC 2001 Bursaries [I2191]
Selection will be based on financial need. Apply to Student Financial Services with a completed Need Assessment Form by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** The Class of OVC 2001  
**Qualification(s):** Students registered in the DVM program with demonstrated financial need.

**Amount:** 2 awards of $1,000
IX. Scholarships and Other Awards, Doctor of Veterinary Medicine

**Cosimo Ferraro DVM Memorial Bursary [I2205]**

The Cosimo Ferraro DVM Memorial Bursary was established in memory of Dr. Cosimo Ferraro (O.V.C.’47) by his family. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7.

**Donor(s):** Dolores Ferraro

**Qualification(s):** Students registered in Phase 1 of the DVM program with demonstrated financial need and an interest in companion animal medicine, as demonstrated by listing companion animal practice as their Veterinary Clinical Practice career objective in their entrance survey will be eligible to apply. Selection will be based on financial need.

**Amount:** 1 award of $1,000

**David Havoic Bursary [I3087]**

Established by the Havoic family, and inspired by the support that Barry Wheeler provided to David Havoic while he was a student at U of G. The bursary will be awarded to students with the greatest financial need. Apply by October 7th to Student Financial Services with a Financial Need Assessment Form and a letter from Student Accessibility Services confirming registration and physical disability.

**Donor(s):** Debbie and David Havoic

**Qualification(s):** Students registered in any program who have a physical disability and are registered with Student Accessibility Services and demonstrate financial need.

**Amount:** 1 award of $1,000

**David R. Leach Memorial Bursary [I3534]**

Provided in memory of David R. Leach by his family, with the assistance of the Ontario government’s OSOTF program. David entered O.A.C. in 1969 as a member of O.A.C. 73 and graduated with a B.Sc. in Agriculture in 1974. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services and a letter from SAS confirming physical disability by October 7. ACCESS AWARD

**Donor(s):** Mrs Deborah Leach-Sartor with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students who are physically disabled as determined by the Student Accessibility Services with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).

**Amount:** 1 award of $1,000

**Dean’s Access Bursaries [I2502]**

Established by Alumni and friends of O.V.C., with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.

**Donor(s):** Alumni and Friends of O.V.C with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in a program offered by the Ontario Veterinary College with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).

**Amount:** Several awards of varies amounts

**Dr. Francis J. Fitzgerald Memorial Bursaries [I2082]**

Established by family, friends, colleagues and clients of Dr. Francis J. Fitzgerald (O.V.C.’37) to honour his commitment to veterinary medicine. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** Mrs. Virginia Fitzgerald

**Qualification(s):** Students enrolled in the D.V.M. program who have a record of satisfactory academic performance and have demonstrated financial need.

**Amount:** Several varies

**Dr. Lynn Helwig Memorial Bursary [I2101]**

This bursary was established in memory of Dr. Lynn Helwig (class of 1954) to honour his dedication to the practice of veterinary medicine. Dr. Helwig worked for Agriculture Canada in the Health of Animals Branch before retiring, served many years on the Board of the OVC Alumni Association, and in his later years was a source of moral support for his niece when she enrolled in the D.V.M. program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form.

**Donor(s):** Jennifer Yensen

**Qualification(s):** Students registered in Phase 4 of the D.V.M. program in the Rural Community Practice Stream who have demonstrated financial need.

**Amount:** 1 award of $1,000

**Dr. M. Adrian Gross Memorial Bursary [I2106]**

Established by family, friends and colleagues of Dr. M. Adrian Gross (O.V.C.’54), a respected veterinarian and a valued employee of the Food and Drug Administration and the Environmental Protection Agency. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** Dora Gross

**Qualification(s):** Students enrolled in the D.V.M. program with a satisfactory academic performance and a demonstrated need of financial assistance.

**Amount:** 1 award of $500

**Dr. Martin DeForest Memorial Bursary [I2157]**

Established by family and friends of Dr. Martin DeForest, OVC ’77 in his memory. Dr. DeForest was a leader in the veterinary profession, and was widely recognized for his compassion and commitment to animal health. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** Friends and Family of Dr. Martin DeForest

**Qualification(s):** Students enrolled in the D.V.M. program who have a record of satisfactory academic performance and have demonstrated financial need.

**Amount:** 1 award of $450

**Dr. R.C. Croucher Bursary [I2519]**

Established by Dr. Ross C. Croucher, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Ross C. Croucher, OVC ’50 with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students registered in the D.V.M. program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).

**Amount:** 1 award of $800

**Dr. Robert W. Woolner Bursary [I2190]**

The estate of Elizabeth M. Woolner established this bursary in memory of her husband, Dr. Robert W. Woolner, OVC 1939, who was a casualty of the Second World War while a flight sergeant with the Royal Canadian Air Force. Selection will be based on financial need. Apply to Student Financial Services with a completed Need Assessment Form by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** Estate of Elizabeth M. Woolner

**Qualification(s):** Students registered in either Phase 3 or 4 of the DVM program with demonstrated financial need.

**Amount:** 2 awards of $5,000

**Edith B. Williams Bursary [I2072]**

This bursary is provided in memory of Dr. Williams, O.V.C.’41. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.

**Donor(s):** Friends of Family of Edith B. Williams

**Qualification(s):** Students enrolled in the D.V.M. program who have a record of satisfactory academic performance and have demonstrated financial need.

**Amount:** 1 award of varying amounts

**Elizabeth Burton Bursaries [I3503]**

Mrs. Elizabeth Burton, with the assistance of the Ontario government’s OSOTF program, provides bursaries to students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Mrs. Elizabeth Burton with matching funding through the Ontario Student Opportunities Trust Fund

**Qualification(s):** Students in second, third or fourth year with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).

**Amount:** Several awards of varying amounts

Last Revision: July 4, 2019 2019-2020 Undergraduate Calendar
### Essex County Veterinary Association Bursary [I2529]
Established by the Essex County Veterinary Association, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD**

- **Donor(s):** Essex County Veterinary Association with matching funding through the Ontario Student Opportunities Trust Fund
- **Qualification(s):** D.V.M. student with demonstrated financial need. Preference will be given to a student from Essex County. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
- **Amount:** 1 award of $500

### Gloria Lemieux Bursaries [I2156]
Established by the late Gloria Lemieux through a will bequest, these bursaries recognize her concern for animals and desire to help students pursuing veterinary studies. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

- **Donor(s):** Estate of Gloria Lemieux
- **Qualification(s):** Students enrolled in the D.V.M. program who have a record of satisfactory academic performance and demonstrated need of financial assistance.
- **Amount:** Several awards of varying amounts

### Grant and Muriel Crittenden Bursaries [I2018]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

- **Donor(s):** The estate of Grant and Muriel Crittenden
- **Qualification(s):** Students enrolled in the D.V.M. program who have a record of satisfactory academic performance and have demonstrated financial need.
- **Amount:** Several varies

### Gryphon Investment Council Bursaries [I3513]
Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

- **Donor(s):** Gryphon Investment Council Inc. with matching funding through the Ontario Student Opportunities Trust Fund
- **Qualification(s):** Full-time students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
- **Amount:** 2 awards of $1,500

### Guelph Compassionate Health and Dental Bursary [I3061]
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health and dental needs above and beyond the benefits offered through the University of Guelph’s mandatory Student Health Plan, University of Guelph’s Student Dental Plan or comparable personal dental plan. Apply to Student Financial Services, Manager, Student Awards, with: (1) a completed Financial Need Assessment form; (2) a letter from physician or dentist about the required procedure/treatment that indicate the nature of the unforeseen health or dental emergency and its impact on the student's studies; (3) cost estimates from the health or dental practitioner identified in the Regulated Health Professions Act/RHPA; (4) physician or dentist contact information; and (5) Insurance coverage – proof that this procedure is not covered under any provincial or private health coverage already, including the Student Health Plan Student. Applications will be reviewed throughout the semester to handle emergencies immediately. If approved for this bursary, a receipt will be required to be returned to our office once the procedure is completed, unless a receipt has been submitted with the application initially. Students may only receive the bursary once per academic year.

- **Donor(s):** Student Health and Dental Plan Reserve
- **Qualification(s):** Students currently registered at the University of Guelph and/or be enrolled under the University of Guelph mandatory Student Health Plan. The student must require treatment for an unforeseen health and dental emergency, which is not currently or completely covered by the Student Health Plan, Student Dental Plan or comparable personal dental plan, and requires immediate intervention and treatment for which the consequences of not receiving treatment may impact on the student’s academic progress.
- **Amount:** Several awards of various amounts to a maximum of $1,500

### Guelph Student Assistance Program [I3056]
These bursaries have been established and approved by undergraduate students through student referendum to assist undergraduate and University of Guelph campus diploma students in financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP). Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

- **Donor(s):** Undergraduate Students
- **Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need.
- **Amount:** Several awards of varying amounts up to $1,000

### Harriet Bilbey Bursary [I2144]
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

- **Donor(s):** Estate of Harriet Bilbey
- **Qualification(s):** Student enrolled in the D.V.M. program with a record of satisfactory academic performance and demonstrated financial need.
- **Amount:** 1 award of $650

### Helen Davidson Memorial Bursary [I2509]
Established by Gladys M. Davidson, as a memorial to her beloved sister Helen, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD**

- **Donor(s):** Established by Gladys M. Davidson with matching funding through the Ontario Student Opportunities Trust Fund
- **Qualification(s):** Full-time students in the D.V.M. program who have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
- **Amount:** 8 awards of $1,000

### Hill’s Bursary [I2511]
Established by Hill's Pet Nutrition, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. **ACCESS AWARD**

- **Donor(s):** Hill's Pet Nutrition Canada Inc. with matching funding through the Ontario Student Opportunities Trust Fund
- **Qualification(s):** D.V.M. student with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
- **Amount:** 1 award of $1,500

---

*Last Revision: July 4, 2019*
<table>
<thead>
<tr>
<th><strong>Howard and Myrtle Rogers Bursaries [13537]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided by the Estate of Howard and Myrtle Rogers, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> The Estate of Howard and Myrtle Rogers with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students with demonstrated financial need. Preference will be given to students from Wellington County. Students are encouraged to apply for an award in each year of study. The award may have been held in previous years but students must demonstrate ongoing financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 10 up to $2,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Indigenous Student Bursary [13068]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>In 2009, the Ministry of Advanced Education and Skills Development established the this Bursary as part of their new Aboriginal post-secondary education funding initiative. These bursaries provide direct support to Aboriginal Students with demonstrated financial need to assist with financing their education. Apply to Student Financial Services by October 7th with a Financial Need Assessment Form and complete the Indigenous Student Bursary application. Selection is based on financial need.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Ministry of Advanced Education and Skills Development (MAESD)</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Aboriginal students or students who identify as having Aboriginal identity and/or heritage (self-identification is sufficient) who are registered in any degree, are a resident of Ontario (as defined by OSAP), and have demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> several awards ranging in values from $1,000 to $3,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>International Emergency Medical Assistance [13059]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The University of Guelph provides support to International undergraduate students that are faced with unexpected, or unforeseen financial shortfalls due to a medical issue not covered by UHIP or the Student Dental/Medical insurance plans. Students should apply to the International Student Advisor, in the Centre for International Programs office, by completing an International Student Financial Need Assessment Form (N.A.F.) and submitting documentation to support the medical issue. These bursaries are awarded on an on-going basis.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> University of Guelph</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> International students registered in a degree program and have completed a minimum 1.50 credits who have a medical emergency expenses not covered by UHIP or the Student Dental/Medical insurance plans and demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several awards of varying amounts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Irvine and Grace Black Memorial Bursary [13051]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established in memory of Irvine and Grace Black, by friends and family to recognize their many contributions to young people. Irvine, a well-known sheep breeder, was a judge at College Royal and the Royal Winter Fair for over fifty years, and Grace was active in the Women’s Institute and the Fer gus Fall Fair. Apply with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining involvement in the 4-H Club and/or a Women’s Institute by October 7.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Family and friends of Irvine and Grace Black</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to applicants who are, or have been, active in the 4-H Club and/or a Women’s Institute.</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ivey Cook Bursaries [13076]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply to SAS using the “New Student Intake Form” and a letter explaining your situation and attach documentation showing the denied provincial funding. Recipients will be selected by the SAS Learning Disabilities Team on a first come first served basis, based on the validity and need for an assessment.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Suzanne Ivey Cook</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students who have been denied funding through the Ontario Student Assistance Program (OSAP) or their provincial/territorial student aid program who require academic accommodation or support through the Student Accessibility Services (SAS) and who are unable to pay for the required assessment.</td>
</tr>
<tr>
<td><strong>Amount:</strong> several awards of up to $1,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Lady Glencora Bursaries [12586]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the Rathlyn Foundation, with the assistance of the Ontario government’s OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Rathlyn Foundation with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in the D.V.M. program and students in the honours B.Sc. (Bio-Med) program who have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several awards up to $5,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Lesley Lewisohn Stewart Bursary [12604]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Mr. Neville Lewisohn</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students enrolled in the D.V.M. program who have a record of satisfactory academic performance and have demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several varies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Linda Hutson Memorial Bursary [12197]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students should apply by October 7th to the Student Financial Services with a completed Need Assessment form. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. Selection will be based on financial need.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Estate of Linda Hutson</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students enrolled in the DVM program in the Ontario Veterinary College with demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> 2 awards of $3,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Lucy and Dora Williams Bursary in Veterinary Medicine [12184]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established to honour the OVC alumni who have provided exceptional care to their family pets. Apply to Student Financial Services with a Financial Need Assessment form by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Anonymous</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time students registered in the DVM program with demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> several awards of varying amounts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Margaret Emma (Peggy) and Donald Alan Melton Bursaries [12503]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by Donald Alan Melton, with the assistance of the Ontario government’s OSOTF program, as a memorial to his beloved wife, Peggy, and in recognition of her lifelong devotion to animals and concern for their welfare. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services, by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Established by Donald Alan Melton with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in the D.V.M. program and completed Phase 1 of their program with satisfactory academic performance. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several awards of up to $10,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Mary J. Whitelock Bursaries [13524]</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Estate of Mary J. Whitelock with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTE award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 13 awards of $2,000</td>
</tr>
<tr>
<td><strong>Méétis Nation of Ontario Bursary</strong> [13092]</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>The Métis Nation of Ontario has established this bursary to encourage Métis people within Ontario to pursue post-secondary education and to support Métis students in undergraduate programs. Selection will be based on financial need. Apply by October 7th with a completed in-course Financial Need Assessment form and statement confirming Métis status and include your card number.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Métis Nation of Ontario</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students who self-identify as Métis and are not registered as an Indian under the Indian Act or as an Inuk on an Inuit registry are eligible. Applicants may be registered in any program and must meet all academic program requirements.</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several varies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ontario First Generation Bursary</strong> [13062]</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Ministry of Advanced Education &amp; Skills Development (MAESD) established the Ontario First Generation Student Bursary as part of their Access to Opportunities Strategy. A first generation student is an individual whose parents have not attended postsecondary studies full-time or part-time, in or outside Canada, at any time or in any program. Apply by October 7th to Student Financial Services with a completed Financial Need Assessment Form and the First Generation Bursary application form. Selection is based on financial need.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Ministry of Advanced Education &amp; Skills Development (MAESD)</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students registered in any program who are first generation students, Ontario residents (as defined by OSAP) and who have demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> several awards ranging from $1,000 to $3,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ohio Veterinary Medical Association Bursary</strong> [12505]</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Ohio Veterinary Medical Association established the Ohio Veterinary Medical Association Bursary with the assistance of the Ohio government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7th. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Ohio Veterinary Medical Association with matching funding through the Ohio Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time D.V.M. student with demonstrated financial need. Preference will be given to OVMA student members. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>OVC '39 ACCESS Bursary</strong> [12591]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the Class of O.V.C.'39, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7th. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> OVC '39 with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time students in the D.V.M. program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 1 award of $400</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>OVC '48 Bursary</strong> [12116]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the class of O.V.C.'48 and their families to assist undergraduate veterinary students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7th. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> Class of O.V.C.'48</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students enrolled in the D.V.M. program with a record of satisfactory academic performance and demonstrated financial need. Preference will be given to students who have completed Phase 2 of the D.V.M. program.</td>
</tr>
<tr>
<td><strong>Amount:</strong> Several varies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>OVC '52 Bursary</strong> [12143]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the class of O.V.C.'52 in memory of deceased classmates to assist undergraduate veterinary students with demonstrated financial need. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7th. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> The Class of O.V.C.'52</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Students enrolled full-time in the D.V.M. program with a record of satisfactory academic standing and demonstrated financial need.</td>
</tr>
<tr>
<td><strong>Amount:</strong> several awards of $1,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>OVC '49 and Dr. Ray Cormack Bursaries</strong> [12504]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by the Class of O.V.C.'49 and Dr. Ray Cormack (O.V.C.'49), with the assistance of the Ontario government's OSOTF program, to commemorate the 50th anniversary of their graduation from the college. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7th. Students will be considered for this award automatically once a N.A.F. has been submitted by the deadline date. ACCESS AWARD.</td>
</tr>
<tr>
<td><strong>Donor(s):</strong> OVC '49-Cormack Fund with matching funding through the Ontario Student Opportunities Trust Fund</td>
</tr>
<tr>
<td><strong>Qualification(s):</strong> Full-time students in the Doctor of Veterinary Medicine program who have demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).</td>
</tr>
<tr>
<td><strong>Amount:</strong> 5 awards of $1,000</td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td><strong>Pearl and Percy Kaine Bursaries</strong> [I2500]</td>
</tr>
<tr>
<td><strong>Robert Auger Humanitarian Bursary</strong> [I3058]</td>
</tr>
<tr>
<td><strong>Robinson Memorial Bursary</strong> [I2118]</td>
</tr>
<tr>
<td><strong>Scotiabank Bursaries</strong> [I3532]</td>
</tr>
<tr>
<td><strong>Shirley Endean Bursaries</strong> [I3570]</td>
</tr>
<tr>
<td><strong>Sigmund Samuel Goodman Memorial Bursary</strong> [I250]</td>
</tr>
</tbody>
</table>

*IX. Scholarships and Other Awards, Doctor of Veterinary Medicine*
### University of Guelph Undergraduate In-Course Bursaries (TSA - UG) [I3037]

The University of Guelph offers in-course bursaries to students who have demonstrated financial need. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need.  
**Amount:** Several awards up to a maximum of $6,000

### University Student Assistance Program [I3057]

These bursaries have been established and approved by the University of Guelph to assist undergraduate and University of Guelph campus diploma students in financial need. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** University of Guelph  
**Qualification(s):** Full-time undergraduate students registered in any degree program with demonstrated financial need. Preference will be given to students who are not eligible for provincial and/or federal assistance programs such as Ontario Student Assistance Program (OSAP) and/or Canada Student Loan Program (CSLP).  
**Amount:** Several awards of various amounts to a maximum of $1,000

### Velma Carter Davis Bursary [I2210]

This award was established in memory of Vera Carter Davis and inspired by her love for animals. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date.

**Donor(s):** Lynn Bonany  
**Qualification(s):** Phase 4 students enrolled the small animal stream of the DVM program who have participated in extracurricular or volunteer activities related to small animal care since admission to the DVM program with demonstrated financial need.  
**Amount:** 1 award of $1,750

### Zoetis Bursaries [I2506]

Provided by Pfizer Canada Inc., with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Students will be considered for this award automatically once a N.A.F has been submitted by the deadline date. ACCESS AWARD

**Donor(s):** Pfizer Canada Inc. with matching funding through the Ontario Student Opportunities Trust Fund  
**Qualification(s):** Full-time students in the D.V.M. program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 3 awards of $1,000
## Other Forms of Financial Assistance

### Open Learning and Educational Support Awards

<table>
<thead>
<tr>
<th>Open Learning Bursaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established by faculty, staff and friends of Open Learning. These funds are intended to provide support for non-degree students that are enrolled in an Open Learning program (courses, certificates, and diplomas) in need of financial assistance. Apply by January 30 or June 30 for consideration for Fall, Winter, and/or Spring semesters of study. For more information, visit <a href="http://opened.uoguelph.ca/student-resources/financial-assistance">http://opened.uoguelph.ca/student-resources/financial-assistance</a>. Qualification(s): Canadian citizens or permanent residents with the greatest financial need</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Virginia L. Gray Memorial Bursary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family, friends and colleagues of Virginia Gray, former Director, Office of Open Learning have established and contributed to the Virginia L. Gray Memorial Bursary as a tribute to her exemplary work in continuing and distance education over 38 years at the University of Guelph. Students interested in enrolling in continuing education and/or distance education courses are eligible to apply. Applicants must be Canadian citizens or Permanent residents and must not be enrolled in a degree program. Apply to Open Learning and Educational Support by January 30th or July 30th for the following Fall, Winter and/or Summer semesters of study with a letter of application outlining financial need with pertinent supporting documentation. Students may receive the bursary only once. For more information, visit <a href="http://opened.uoguelph.ca/student-resources/financial-assistance">http://opened.uoguelph.ca/student-resources/financial-assistance</a>.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prof. H.J. Malik Statistics Prize</th>
</tr>
</thead>
<tbody>
<tr>
<td>This $150 prize is provided in honour of H.J. Malik, Professor Emeritus in the Department of Mathematics and Statistics, by family, colleagues and friends. Application not required. Open Learning program distance education student who has completed the courses STAT*2060, Statistics for Business Decisions, with the highest attained grade over 80% in the previous year. All Open Learning program students who complete this course in the previous spring, fall or winter semesters will automatically be considered the following May.</td>
</tr>
</tbody>
</table>

### Ontario Student Assistance Program (OSAP)

Students who meet the Ontario residence requirements and who require financial assistance to attend the University, should consider applying to the Ontario Student Assistance Program (OSAP) online at osap.gov.on.ca. More information can be found by visiting uoguelph.ca/registrar/studentfinance.

### Out of Province Student Assistance Programs

Students who are bona fide residents of a province outside of Ontario and who require financial assistance to attend the University should apply to their home province or territory for financial assistance. More information can be found by visiting uoguelph.ca/registrar/studentfinance.
## X. Degree Programs

### Specializations and Their Degrees

Specializations and the Degree under which they are offered.

<table>
<thead>
<tr>
<th>Specialization Name</th>
<th>Specialization Acronym</th>
<th>Honours Program Major</th>
<th>Honours Program Minor</th>
<th>Honours Program Area of Emphasis</th>
<th>General Program</th>
<th>Co-op Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>ACCT</td>
<td>BCOM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Development</td>
<td>ADEV</td>
<td>BASC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>AGR</td>
<td>BSAG</td>
<td>BAS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture &amp; Food Security</td>
<td>AFS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Honours) Agricultural</td>
<td>AGRS</td>
<td>BSAG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal Biology</td>
<td>ABI</td>
<td>BSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal Science</td>
<td>ANSC</td>
<td>BSAG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td>ANTH</td>
<td>BA</td>
<td>BAS</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Human Nutrition</td>
<td>AHN</td>
<td>BASC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Plant Science</td>
<td>APS</td>
<td></td>
<td></td>
<td>BSCH.PLSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art History</td>
<td>ARTH</td>
<td>BA</td>
<td>BA</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts, Culture and Heritage Management</td>
<td>ACHM</td>
<td>BA</td>
<td>BA</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biochemistry</td>
<td>BIOC</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biodiversity</td>
<td>BIOD</td>
<td>BSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bioinformatics</td>
<td>BINF</td>
<td></td>
<td></td>
<td>BSCH.MSCI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological &amp; Medical Physics</td>
<td>BMPH</td>
<td>BSC</td>
<td></td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological and Pharmaceutical Chemistry</td>
<td>BPCH</td>
<td>BSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological Engineering</td>
<td>BIOE</td>
<td>BENG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological Science</td>
<td>BIOS</td>
<td>BSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>BIOL</td>
<td></td>
<td></td>
<td>BS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biomathematical or Biostatistical Modelling</td>
<td>BBM</td>
<td></td>
<td></td>
<td>BSCH.MSCI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bio-Medical Science</td>
<td>BIOM</td>
<td>BSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biomedical Engineering</td>
<td>BME</td>
<td>BENG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biomedical Toxicology</td>
<td>BTOX</td>
<td>BSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biotechnology</td>
<td>BIOT</td>
<td></td>
<td></td>
<td>BS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botany</td>
<td>BOT</td>
<td></td>
<td></td>
<td>BSCH.PLSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>BUS</td>
<td>BA</td>
<td>BA</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Economics</td>
<td>BECN</td>
<td>BA</td>
<td>BA</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Physics</td>
<td>CHPY</td>
<td>BSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHEM</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child, Youth and Family</td>
<td>CYF</td>
<td>BASC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classical Studies</td>
<td>CLAS</td>
<td>BA</td>
<td>BA</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>CENG</td>
<td>BENG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Science</td>
<td>CS</td>
<td>BCOMP</td>
<td></td>
<td></td>
<td>BAH.MSCI</td>
<td></td>
</tr>
<tr>
<td>Computing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BCOMP</td>
</tr>
<tr>
<td>Computing &amp; Information Science</td>
<td>CTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BCOMP</td>
</tr>
<tr>
<td>Creative Writing</td>
<td>CW</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BCOMP</td>
</tr>
<tr>
<td>Criminal Justice &amp; Public Policy</td>
<td>CJPP</td>
<td>BA</td>
<td>BA</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialization Name</td>
<td>Specialization Acronym</td>
<td>Honours Program Major</td>
<td>Honours Program Minor</td>
<td>Honours Program Area of Emphasis</td>
<td>General Program</td>
<td>Co-op Program</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>------------------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>----------------------------------</td>
<td>-----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Crop, Horticulture and Turfgrass Sciences</td>
<td>CHAT</td>
<td>BSAG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development in the Canadian Context</td>
<td>DCC</td>
<td></td>
<td></td>
<td>BAH.IDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development in the Fragile Contexts</td>
<td>DFC</td>
<td></td>
<td></td>
<td>BAH.IDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecology</td>
<td>ECOL</td>
<td>BSES</td>
<td>BSC BAS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>ECON</td>
<td>BA</td>
<td>BA BAS</td>
<td>BAH.MSCI BSCH.MSCI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity &amp; Systems</td>
<td>EAS</td>
<td></td>
<td></td>
<td>BAH.IDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy &amp; Mass Transfer</td>
<td>EMT</td>
<td></td>
<td></td>
<td>BSCH.MSCI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Systems &amp; Computing</td>
<td>ESC</td>
<td>BENG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>ENGL</td>
<td>BA</td>
<td>BA BAS</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Biology</td>
<td>ENVB</td>
<td>BSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Economics &amp; Policy</td>
<td>EEP</td>
<td>BSES</td>
<td></td>
<td>BSES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>ENVE</td>
<td>BENG</td>
<td>BENG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Geomatics</td>
<td>EG</td>
<td>BSC</td>
<td></td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Governance</td>
<td>EGOV</td>
<td>BA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Management</td>
<td>EM</td>
<td>BBRM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment and Resource Management</td>
<td>ERM</td>
<td>BSES</td>
<td></td>
<td>BSES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Sciences</td>
<td>ENVS</td>
<td>BSES</td>
<td></td>
<td>BSES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental and Sustainable Development</td>
<td>ESD</td>
<td></td>
<td></td>
<td>BAH.IDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equine Management</td>
<td>EQM</td>
<td>BBRM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Culture &amp; Civilization</td>
<td>ECC</td>
<td>BA</td>
<td>BAS</td>
<td>BAH.EURS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Business Studies</td>
<td>EBS</td>
<td></td>
<td></td>
<td>BAH.EURS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Studies</td>
<td>EURS</td>
<td>BA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family &amp; Child Studies</td>
<td>FCS</td>
<td>BA</td>
<td>BAS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>FIN</td>
<td></td>
<td></td>
<td>BCOM.MEF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food and Agricultural Business</td>
<td>FAB</td>
<td>BCOM</td>
<td></td>
<td>BCOM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food, Agricultural and Resource Economics</td>
<td>FARE</td>
<td>BA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Engineering</td>
<td>FENG</td>
<td>BENG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Industry Management</td>
<td>FIM</td>
<td>BBRM</td>
<td></td>
<td>BBRM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Science</td>
<td>FOOD</td>
<td>BSC</td>
<td></td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>French Studies</td>
<td>FREN</td>
<td>BA</td>
<td>BA BAS</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIS &amp; Environmental Analysis</td>
<td>GIS</td>
<td></td>
<td></td>
<td>BSC BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>GEOG</td>
<td>BA</td>
<td>BA BAS</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>GERM</td>
<td>BA</td>
<td>BAS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>HIST</td>
<td>BA</td>
<td>BA BAS</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitality and Tourism Management</td>
<td>HTM</td>
<td>BCOM</td>
<td></td>
<td>BCOM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotel and Lodging</td>
<td>HL</td>
<td></td>
<td></td>
<td>BCOMM. HTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Kinetics</td>
<td>HK</td>
<td>BSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td>HR</td>
<td></td>
<td></td>
<td>BA BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Studies</td>
<td>IS</td>
<td>BA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualized</td>
<td>INDV</td>
<td></td>
<td></td>
<td>BAH.MSCI BSCH.MSCI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Development Studies</td>
<td>IDS</td>
<td>BA</td>
<td>BA BAS</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italian</td>
<td>ITAL</td>
<td>BA</td>
<td>BAS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape Architecture</td>
<td>BLA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Last Revision: July 4, 2019
<table>
<thead>
<tr>
<th>Specialization Name</th>
<th>Specialization Acronym</th>
<th>Honours Program Major</th>
<th>Honours Program Minor</th>
<th>Honours Program Area of Emphasis</th>
<th>General Program</th>
<th>Co-op Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>MGMT</td>
<td>BCOM</td>
<td>BCOM.MEF</td>
<td>BCOM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Economics &amp; Finance</td>
<td>MEF</td>
<td>BCOM</td>
<td>BCOM.MEF</td>
<td>BCOM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine &amp; Freshwater Biology</td>
<td>MFB</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing Management</td>
<td>MKMN</td>
<td>BCOM</td>
<td>BCOM.MEF</td>
<td>BCOM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematical Economics</td>
<td>MAEC</td>
<td>BA</td>
<td>BA</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematical Science</td>
<td>MSCI</td>
<td>BA, BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>MATH</td>
<td>BA, BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>MECH</td>
<td>BENG</td>
<td>BENG</td>
<td>BENG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media &amp; Cinema Studies</td>
<td>MCST</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microbiology</td>
<td>MICR</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Biology &amp; Genetics</td>
<td>MBG</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Museum Studies</td>
<td>MS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>MUSC</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nanoscience</td>
<td>NANO</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroscience</td>
<td>NEUR</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutritional &amp; Nutraceutical Sciences</td>
<td>NANS</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>PHIL</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Science</td>
<td>PSCI</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>PHYS</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant Biotechnology</td>
<td>PBTC</td>
<td>BSCH.PLSC</td>
<td>BSCH.PLSC</td>
<td>BSCH.PLSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant Environmental Science</td>
<td>PESC</td>
<td>BSCH.PLSC</td>
<td>BSCH.PLSC</td>
<td>BSCH.PLSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant Science</td>
<td>PLSC</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td>POLS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>PSYC</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Management</td>
<td>PMGT</td>
<td>BCOM</td>
<td>BCOM</td>
<td>BCOM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate &amp; Housing</td>
<td>REH</td>
<td>BCOM</td>
<td>BCOM</td>
<td>BCOM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restaurant &amp; Food Service</td>
<td>RFS</td>
<td>BCOM.MEM</td>
<td>BCOM.MEM</td>
<td>BCOM.MEM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signal Processing</td>
<td>SP</td>
<td>BSCH.MSCI</td>
<td>BSCH.MSCI</td>
<td>BSCH.MSCI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>SOC</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish and Hispanic Studies</td>
<td>SPAH</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software Engineering</td>
<td>SENG</td>
<td>BCOMP</td>
<td>BCOMP</td>
<td>BCOMP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td>STAT</td>
<td>BA, BSC</td>
<td>BSC</td>
<td>BA, BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studio Art</td>
<td>SART</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theatre Studies</td>
<td>THST</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td>BA, BAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theoretical Physics</td>
<td>THPY</td>
<td>BSC</td>
<td>BSC</td>
<td>BSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism</td>
<td>TM</td>
<td>BCOM</td>
<td>BCOM</td>
<td>BCOM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veterinary Medicine</td>
<td>DVM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialization Name</td>
<td>Specialization Acronym</td>
<td>Honours Program Major</td>
<td>Honours Program Minor</td>
<td>Honours Program Area of Emphasis</td>
<td>General Program</td>
<td>Co-op Program</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------------------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>----------------------------------</td>
<td>-----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Water Resources Engineering</td>
<td>WRE</td>
<td>BENG</td>
<td></td>
<td></td>
<td></td>
<td>BENG</td>
</tr>
<tr>
<td>Wildlife Biology &amp; Conservation</td>
<td>WBC</td>
<td>BSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoology</td>
<td>ZOO</td>
<td>BSC</td>
<td>BSC, BAS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Applied Science (B.A.Sc.)

Program Information
The University of Guelph offers an 8 semester (20.00 credits) honours program leading
to a Bachelor of Applied Science (B.A.Sc.) degree. Students must select one of the 3
following major areas of study: 

Adult Development (ADEV)
Applied Human Nutrition (AHN)
Child, Youth and Family (CYF)

Co-operative Education is available in the following programs:

Adult Development (Co-op) (ADEV:C)
Child, Youth and Family (Co-op) (CYF:C)

Elective offerings enable students to select courses which support or complement their
primary field of study.

The program is interdisciplinary and provides a distinctive and integrated focus of applied
social science in each of the 3 majors. Courses from the traditional disciplines in other
departments in the University are coupled with courses offered by faculty members in the
Department of Family Relations and Applied Nutrition whose own backgrounds reflect
the interdisciplinary nature of the program.

Laboratory, practicum and field experiences enhance the students' opportunities to grasp
the contributions of the social, physical and biological sciences to significant facets of
human behaviour and experience, whether in family, community, or in educational settings.

Academic Counselling

Program Counselling
A B.A.Sc. program counsellor is available to assist prospective students in the selection
of their major and initial courses, and to respond to questions regarding any other aspects
of their anticipated program. The program counsellor will also assist in-course students
who need information or advice about their program or other academic regulations, who
seek information on services and resources available to students or who are contemplating
transfer into or out of their current major or degree program.

Academic Advising

On entering the program all students are assigned to a departmental advisor by major.
Co-operative Education students in all majors are also assigned to an advisor. This advisor
is thoroughly familiar with the academic requirements of the program and is also
knowledgeable about career opportunities which relate to a student's specific major.
Students are strongly encouraged to attend all meetings called by their departmental
advisors, and to set up individual meetings with them when they have questions or concerns
about their major, or their performance in the program.

Continuation of Study
Students are advised to consult the regulations for Continuation of Study which are outlined
in detail in Section VIII—Undergraduate Degree Regulations & Procedures.

Conditions for Graduation

To qualify for the degree Bachelor of Applied Science, the student must satisfy the
following conditions:

- the student must have successfully completed the schedule of studies requirements
  for the specified major
- the student must have a cumulative average of 60% or higher
- the student must have a term academic standing of Eligible to Continue

Schedule of Studies

Courses specified in the Schedule of Studies are required courses and must be completed
successfully. A full course load normally includes 2.50 credits (normally 5 courses). The
requirements for each major are set out below.

Special Expenses

Expenses for field trips can range from $20 to $30 per semester in the first 4 semesters
and from $25 to $50 in each of the last 4 semesters. In certain course modest expenses
will be incurred for supplies and where appropriate for laboratory costs. According to
recent Ontario legislation, agencies licensed by the Ministry of Community and Social
Services which care for, or provide service to, children or vulnerable adults are required
to do criminal reference checks on all their employees. Students enrolled in practica or
field placement courses may be required to submit to the agency with which they are
placed, personal information about any criminal convictions and pending criminal charges.
The cost of acquiring this criminal reference check (Canadian Police Information Check)
will be the responsibility of each student.

Adult Development (ADEV)

Department of Family Relations and Applied Nutrition, College of Social and Applied
Human Sciences

The Adult Development major focuses on health and well-being from young adulthood
to old age within the context of changing family relationships and diverse social and
cultural influences. Courses focus on current research and theory in adult development
and aging, family relationships, human sexuality, social policy and community services.
Field placements and community service learning opportunities enable students to gain
knowledge, skills and values appropriate for work with individuals and groups in a variety
of settings.

Graduates of this program are pursuing careers in a variety of settings including family
and community service agencies; government policy-making, administration, and health
promotion divisions; support services delivery for seniors and their families; health care
agencies; employee and family assistance programs; and local social planning councils.

This program provides a solid foundation for the pursuit of graduate studies in fields such
as: family relations and human development, social work, human sexuality, gerontology,
physical, occupational and recreation therapy programs, family law and mediation, couple
and family therapy, education, health promotion, social policy and human resource
management (business).

This interdisciplinary program is designed to provide students with an understanding of
the influence of psychological, social, biological and economic factors on individual
development, capabilities, health and relationships across the lifespan. It is one of several
majors in the Department that share an over-arching goal of applying knowledge to promote
individual and family well-being. This major offers a high degree of flexibility for students,
who may choose to deepen their studies in one or more of the core content areas in the
major (adulthood and aging, family and social relationships, human sexuality, or health
and well-being) and/or to choose electives in a related or complementary field.

Program Requirements

All students in the Adult Development major must successfully complete a minimum of
20.00 credits, including the core of 10.50 required credits as outlined in the Schedule of
Studies.

Some students may wish to select courses that provide a broad background appropriate
for careers in teaching, social work, health promotion, couple and family relationships,
physical, occupational and recreation therapy, nursing, business, public service management
or other areas of work. Students interested in pursuing graduate education are encouraged
to complete an undergraduate thesis in their senior year and to participate in faculty
research projects.

In addition to the core requirements and options, there are courses in various departments
throughout the University which may be taken as electives. Lists of suggested electives
that relate to particular careers or areas of interest and requirements for admission to
various graduate programs, including Faculties of Education, are available from the
B.A.Sc. Program Counsellor.

Students must meet the continuation of study requirements at the time of graduation and
have a minimum 60.00% cumulative average.

Students may take one minor in addition to the Adult Development major. See the
University of Guelph Calendar, Section X, Degree Programs, Specialization and Their
Degrees for list of minors: http://www.uoguelph.ca/Registrar/calendars/undergraduate/
current/c1/index.shtml. The 60.00% requirement applies to each major and minor.

Double Counting of Courses

A maximum of 50 percent of the courses applied to a minor may be courses taken in
fulfilment of the major where required courses are the same.

Counselling on Minors

The B.A.Sc. program counsellor assists students in the selection of minors, interpreting
program and academic regulations.

Academic departments offer the minors and assign faculty advisors to assist students with
academic planning (e.g., a faculty advisor in the Psychology department handles queries
about a minor in Psychology). Students should consult the appropriate faculty advisor,
along with the B.A.Sc. Program Counsellor, when declaring a minor or requiring advice
on the completion of specialization requirements. The list of faculty advisors is available
on the Undergraduate Academic Information Centre website: https://www.uoguelph.ca/
uaic/facultyadvisors or contact the B.A.Sc. Program Counsellor for further information.

Major

Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRHD*1100</td>
<td>0.50</td>
<td>Life: Health and Well-Being</td>
</tr>
<tr>
<td>NUTR*1010</td>
<td>0.50</td>
<td>Introduction to Nutrition</td>
</tr>
<tr>
<td>PSYC*1100</td>
<td>0.50</td>
<td>Introduction to Psychology</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH*1150</td>
<td>0.50</td>
</tr>
<tr>
<td>SOC*1100</td>
<td>0.50</td>
</tr>
</tbody>
</table>

0.50 electives

Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRHD*1010</td>
<td>0.50</td>
<td>Human Development</td>
</tr>
<tr>
<td>FRHD*1020</td>
<td>0.50</td>
<td>Couple and Family Relationships</td>
</tr>
<tr>
<td>BIOM*2000</td>
<td>0.50</td>
<td>Concepts in Human Physiology</td>
</tr>
<tr>
<td>MBG*1000</td>
<td>0.50</td>
<td>Genetics and Society</td>
</tr>
</tbody>
</table>

1.00 electives
| Semester 3 | FRHD*2060 [0.50] Adult Development and Aging |
| Semester 4 | FRHD*2100 [0.50] Development of Human Sexuality |
| | STAT*2080 [0.50] Introductory Applied Statistics I |
| | 1.00 electives |
| Semester 5 | FRHD*2400 [0.50] Introduction to Human Services |
| | FRHD*3150 [0.50] Strategies for Behaviour Change |
| | STAT*2090 [0.50] Introductory Applied Statistics II |
| | 1.00 electives |
| Semester 6 | FRHD*3070 [0.50] Research Methods: Family Studies |
| | FRHD*3400 [0.50] Communication and Counselling Skills |
| | 1.50 electives |
| Note: | FRHD*3290 may be taken in Semester 5 or Semester 6 |
| Semester 7 | FRHD*4310 [0.50] Professional Issues * |
| | 2.00 electives |
| Semester 8 | FRHD*4250 [0.50] Aging and Health |
| | One of: |
| | FRHD*4260 [0.50] Social Policy and Gerontology |
| | FRHD*4320 [0.50] Social Policies for Children, Youth and Families |
| | 1.50 electives |

**Electives - Recommended and Program Options**

Students planning to pursue graduate studies are encouraged to take FRHD*4810 and FRHD*4910 (undergraduate thesis courses). Students entering into human services after graduation are encouraged to take FRHD*4290 (4th year practicum course). Students who intend to pursue studies or careers in the following areas, Adult Development and Aging, Family and Social Relations, Human Sexuality and Health or Research may wish to include electives from the following list:  

**Adult Development and Aging Interest**

| FRHD*3060 [0.50] Principles of Social Gerontology |
| FRHD*4190 [0.50] Assessment in Gerontology |
| FRHD*4290 [1.00] Practicum II: Adult Development |
| NUTR*3150 [0.50] Aging and Nutrition |

**Family and Social Relations Interest**

| FRHD*3090 [0.50] Poverty and Health |
| FRHD*4020 [0.50] Family Theory |
| FRHD*4290 [1.00] Practicum II: Adult Development |

**Human Sexuality and Health Interest**

| FRHD*4200 [0.50] Issues in Human Sexuality |
| FRHD*4290 [1.00] Practicum II: Adult Development |

**Research Interest**

| FRHD*4810 [0.50] Thesis I |
| FRHD*4910 [1.00] Thesis II |

**Graduate and Professional Studies**

Students have successfully used the B.A.Sc. degree to gain admission into graduate programs in human development/family science, couple and family therapy, social work, education, applied psychology, sociology, anthropology, occupational therapy, physiotherapy, speech and language, and social policy. If you plan to enter a graduate program after completing the Adult Development major of the B.A.Sc. degree program you will need to select certain courses as part of your undergraduate program to meet graduate program admission requirements. Sometimes these requirements are quite particular which means that you must plan your course selections early and carefully.

Although graduate programs differ in their entrance requirements, most graduate programs require that you have taken (at least): one course in research methods; two undergraduate statistics courses; and have completed an undergraduate thesis.

For many of the programs you will be required to take Graduate Record Exams (GREs) in the specific field of study. You are strongly advised to contact the graduate programs that interest you early in your program to determine the specific entrance requirements of each program.

**Exchange/Study Abroad Opportunities**

Students interested in study abroad experience could consider this in either Semester 5 or 7. If it is in Semester 5, then students could defer FRHD*3400 to Winter Semester 6 with the Practicum FRHD*3290 (with permission). If the study abroad experience is preferred in Semester 7, the Professional Issues course (FRHD*4310) could be taken in Semester 5 (with permission).
X. Degree Programs, Bachelor of Applied Science (B.A.Sc.)

Semester 3 - Fall
COOP*1100 [0.00] Introduction to Co-operative Education
FRHD*2100 [0.50] Development of Human Sexuality
FRHD*2060 [0.50] Adult Development and Aging
FRHD*3070 [0.50] Research Methods: Family Studies
FRHD*3400 [0.50] Communication and Counselling Skills
STAT*2080 [0.50] Introductory Applied Statistics I

Semester 4 - Winter
FRHD*3150 [0.50] Strategies for Behaviour Change
FRHD*2400 [0.50] Introduction to Human Services
STAT*2090 [0.50] Introductory Applied Statistics II

Summer Semester
COOP*1000 [0.50] Co-op Work Term I

Fall Semester
COOP*2000 [0.50] Co-op Work Term II

Semester 5 - Winter
FRHD*3040 [0.50] Parenting and Intergenerational Relationships
FRHD*3290 [1.00] Practicum I: Adult Development
FRHD*4250 [0.50] Aging and Health
One of:
FRHD*4260 [0.50] Social Policy and Gerontology
FRHD*4320 [0.50] Social Policies for Children, Youth and Families

Semester 6 - Summer
2.50 electives

Semester 7 - Fall
FRHD*4310 [0.50] Professional Issues
2.00 electives

Winter Semester
COOP*3000 [0.50] Co-op Work Term III

Semester 8 - Summer
2.50 electives

Electives that Complement the Major
Students planning to pursue graduate studies are encouraged to take FRHD*4810 and FRHD*4910 (undergraduate thesis courses). Students entering into human services after graduation are encouraged to take FRHD*4290 (4th year practicum course). Students who intend to pursue studies or careers in the following areas, Adult Development and Aging, Family and Social Relations, Human Sexuality and Health or Research may wish to include electives from the following list:
FRHD*3060 [0.50] Principles of Social Gerontology
FRHD*4190 [0.50] Assessment in Gerontology
FRHD*4290 [1.00] Practicum II: Adult Development
FRHD*4020 [0.50] Family Theory
FRHD*4810 [0.50] Thesis I
FRHD*4910 [1.00] Thesis II
NUTR*3150 [0.50] Aging and Nutrition

Graduate and Professional Studies
Students have successfully used the B.A.Sc. degree to gain admission into graduate programs in human development/family science, couple and family therapy, social work, education, applied psychology, sociology, anthropology, physical, occupational and recreational therapy, speech and language, and social policy. If you plan to enter a graduate program after completing the Adult Development Co-op major of the B.A.Sc. degree program you will need to select certain courses as part of your undergraduate program to meet graduate program admission requirements. Sometimes these requirements are quite particular which means that you must plan your course selections early and carefully.

Although graduate programs differ in their entrance requirements, most graduate programs require that you have taken (at least): one course in research methods; two undergraduate statistics courses; and have completed an undergraduate thesis.

For many of the programs you will be required to take Graduate Record Exams (GREs) in the specific field of study. You are strongly advised to contact the graduate programs that interest you early in your program to determine the specific entrance requirements of each program.

Applied Human Nutrition (AHN)
Department of Family Relations and Applied Nutrition, College of Social and Applied Human Sciences

The Applied Human Nutrition major recognizes both the biological and the social facets of human nutrition. It focuses on nutrition from a preventive, maintenance and therapeutic perspective, all of which require a thorough understanding of the related biological sciences and of selected aspects of the behavioral sciences. Students learn about nutrition and its application to the maintenance of health and the prevention and treatment of disease. They also learn about individual and social behaviour, particularly in family settings, and the implications of behavioral factors in the establishment of good nutrition status from conception through to old age. Through the effective use of elective courses, the core requirements in the Major can be supplemented to create a program of study which will prepare graduates for a variety of health and education careers in the government or private sectors, or with the food industry. Others may proceed to graduate study in fields such as nutrition, public health nutrition, medicine or education.

An Area of Emphasis in Dietetics is also offered for those interested in becoming Registered Dietitians. Successful completion of the additional required and restricted elective courses will allow students to compete for a limited number of dietetic internship positions after graduation. Graduates who complete dietetic internships are eligible to write national registration examination and become Registered Dietitians, a regulated health profession. The Area of Emphasis in this dietetic education program is accredited under the Partnership for Dietetic Education and Practice (PDEP) and prepares students for eligibility for registration with a provincial dietetics regulatory body. Most graduates completing dietetic internships are employed in hospitals and other health care agencies such as community health centres and long-term care facilities where the credential of Registered Dietitian is required for practice. Some Registered Dietitians also find employment in a wide range of careers in health and education, and in the private sector.

Still others proceed to graduate study in fields such as nutrition, public health nutrition, medicine or education.

Program Requirements

Students in the Applied Human Nutrition Major must include the core of 13.50 required credits in the minimum of 20.00 credits. Students in the Area of Emphasis in Dietetics take an additional 2.00 required credits plus 1.50 restricted electives for 17.00 required credits in the minimum 20.00 credits. Discussion with a departmental advisor regarding the various choices possible from within the Major is strongly recommended. Students will normally register for courses according to the semesters indicated below for Fall and Winter sequencing.

Students taking the Area of Emphasis in Dietetics are strongly encouraged to seek help from departmental advisors to ensure they have selected all the required courses to be eligible to apply for internships.

Minors

Students may take one minor in addition to the Applied Human Nutrition Major. See the University of Guelph Calendar, Section X, Degree Programs, Specialization and Their Degrees for list of minors: https://www.uoguelph.ca/registrar/calendars/undergraduate/current/cur10/index.shtml

Counselling on Minors

The B.A.Sc. program counsellor assists students in the selection of minors, interpreting program and academic regulations. Academic departments offer the minors and assign faculty advisors to assist students with academic planning (e.g., a faculty advisor in the Psychology department handles queries about a minor in Psychology). Students should consult the appropriate faculty advisor, along with the B.A.Sc. Program Counsellor, when declaring a minor or requiring advice on the completion of specialization requirements. The list of faculty advisors is available on the Undergraduate Academic Information Centre website: https://www.uoguelph.ca/au/c10/facultyadvisors or contact the B.A.Sc. Program Counsellor for further information.

Double Counting of Courses

A maximum of 50 percent of the courses applied to a minor may be courses taken in fulfillment of the major where required courses are the same.

Major

Semester 1
CHEM*1040 [0.50] General Chemistry I
FRHD*1100 [0.50] Life: Health and Well-Being
PSYC*1000 [0.50] Introduction to Psychology

One of:
HTM*2700 [0.50] Understanding Foods
NUTR*1010 [0.50] Introduction to Nutrition

0.50 electives

Note: HTM*2700 is recommended for Semester 1 if capacity allows, but may also be taken in Semester 2 by choosing NUTR*1010 in Semester 1

Semester 2
CHEM*1050 [0.50] General Chemistry II
NUTR*1020 [0.50] Professional Practice in Applied Nutrition

One of:
HTM*2700 [0.50] Understanding Foods
NUTR*1010 [0.50] Introduction to Nutrition

One of:
FRHD*1020 [0.50] Couple and Family Relationships
SOC*1100 [0.50] Sociology

0.50 electives
*See note in Semester 1

Semester 3
BIOC*2580 [0.50] Introduction to Biochemistry
HTM*2030 [0.50] Control Systems in the Hospitality Industry
NUTR*2050 [0.50] Nutrition Through the Life Cycle
STAT*2080 [0.50] Introductory Applied Statistics I

0.50 electives
Note: HTM*2030 may be taken in Semester 4.

Note: Students completing an Area of Emphasis in Dietetics must take one of:
CIS*1200 [0.50] Introduction to Computing
MCS*2020 [0.50] Information Management

Semester 4
BIOC*3200 [1.00] Biomedical Physiology
HROB*2090 [0.50] Individuals and Groups in Organizations
MICR*2420 [0.50] Introduction to Microbiology
STAT*2090 [0.50] Introductory Applied Statistics II

Semester 5
FRHD*3070 [0.50] Research Methods: Family Studies
NUTR*3210 [0.50] Fundamentals of Nutrition

1.50 electives or restricted electives
Note: Students completing an Area of Emphasis in Dietetics must take HTM*3090.
HTM*3090 is recommended in Semester 5 in place of elective or restricted elective if capacity allows, but it may also be taken in Semester 6. If taken in Semester 6 take FRHD*3400 and HROB*2290 in Semester 5.

Semester 6
FRHD*3400 [0.50] Communication and Counselling Skills
HROB*2290 [0.50] Human Resources Management
NUTR*3070 [0.50] Nutrition and Physical Activity Interventions
NUTR*3090 [1.00] Clinical Nutrition I

Semester 7
NUTR*4010 [0.50] Nutritional Assessment
NUTR*4070 [0.50] Nutrition Education

1.50 electives or restricted electives
Note: Students completing an Area of Emphasis in Dietetics must take NUTR*4040.

Semester 8
NUTR*4900 [0.50] Selected Topics in Human Nutrition

2.00 electives or restricted electives
Note: With approval from the instructor, students may substitute NUTR*4810 and NUTR*4910 for NUTR*4900.

Area of Emphasis in Dietetics Additional Courses Required
Additional Courses Required (2.00 credits)
HTM*3090 [1.00] Restaurant Operations Management
NUTR*4040 [0.50] Clinical Nutrition II
One of:
CIS*1200 [0.50] Introduction to Computing
MCS*2020 [0.50] Information Management

Restricted Electives
Students must take 1.50 restricted electives, including one 3000 level course, from the following list:
FOOD*2010 [0.50] Principles of Food Science
FOOD*3430 [0.50] Introduction to Food Analysis
FOOD*3700 [0.50] Sensory Evaluation of Foods
HTM*2740 [0.50] Cultural Aspects of Food
HTM*3780 [0.50] Managing Food in Canada
NUTR*3110 [0.50] Food Security
NUTR*3150 [0.50] Aging and Nutrition
One of
FOOD*2400 [0.50] Introduction to Food Chemistry
FOOD*3030 [0.50] Food Chemistry I
FOOD*3050 [0.50] Food Chemistry I
One of
FOOD*2410 [0.50] Introduction to Food Processing
FOOD*3160 [0.75] Food Processing I
One of
FOOD*2420 [0.50] Introduction to Food Microbiology
FOOD*3230 [0.75] Food Microbiology
FOOD*3240 [0.50] Food Microbiology

Note: Some of the restricted electives require prerequisites that are not included in the major.

Child, Youth and Family (CYF)
Department of Family Relations and Applied Nutrition, College of Social and Applied Human Sciences
The Child, Youth and Family major, administered by the Department of Family Relations and Applied Nutrition, examines the psychological, social and physical conditions which influence the growth and development of children and adolescents. While the primary focus of the major is on children and youth, the program regards the family as a primary context of development and as the key to successful interventions for children with developmental, behavioural, or socio-emotional difficulties. Through the effective use of elective courses, the core requirements in the major can be supplemented to create a program of study which will prepare graduates for a variety of careers in child and youth services. Graduates are pursuing child and youth-related careers in a variety of settings including child and youth treatment facilities, elementary schools, paediatric wards in hospitals, family and community service agencies, and child care centres. Students interested in working with children ten years of age and younger may apply for membership in the College of Early Childhood Educators; see further details on required courses below.

Further academic preparation may be required for certain careers. Many graduates go on to pursue graduate education in fields such as family studies, human development, psychology, counselling psychology, social work, speech pathology, and occupational therapy.

Articulation Agreements
The University of Guelph is a partner in several Articulation Agreements concerning the Child, Youth and Family major. Students who enter the B.A.Sc. Child, Youth and Family major with advanced standing through an articulation agreement should identify themselves to the B.A.Sc. Program Counsellor for specific guidance around their Schedule of Studies (see Section IV of this calendar).

Students in the Child, Youth and Family major who are interested in proceeding to teachers college should refer to Section IV--Admissions Information, Articulation Agreements for information about admission to the Bachelor of Education program at Nipissing University.

Program Requirements
All students in the Child, Youth and Family major must include the following core of 11.50 required credits and 0.50 restricted electives to a minimum of 20.00 credits. Students are encouraged to plan their use of electives carefully in order to focus their program on one or a combination of the career options open to graduates. Discussion with a faculty advisor regarding the various choices possible from within the major is strongly recommended. Students will normally register for courses according to the semesters indicated below for Fall and Winter sequencing. Students who register for Summer semesters and other students for whom the semester offerings present difficulty may, where they have the approval of their faculty advisor, take some courses in alternative semesters.

Minors
Students may take one minor in addition to the Child, Youth and Family major. See the University of Guelph Calendar, Section X, Degree Programs, Specialization and Their Degrees for list of minors: http://www.uoguelph.ca/registrars/calendars/undergraduate/current/c10/index.shtml. The 60.00% requirement applies to each major and minor.

Double Counting of Courses
A maximum of 50 percent of the courses applied to a minor may be courses taken in fulfillment of the major where required courses are the same.

Counselling on Minors
The B.A.Sc. program counsellor assists students in the selection of minors, interpreting program and academic regulations. Academic departments offer the minors and assign faculty advisors to assist students with academic planning (e.g., a faculty advisor in the Psychology department handles queries about a minor in Psychology). Students should consult the appropriate faculty advisor, along with the B.A.Sc. Program Counsellor, when declaring a minor or requiring advice on the completion of specialization requirements. The list of faculty advisors is available on the Undergraduate Academic Information Centre website: https://www.uoguelph.ca/undergraduate/academic/undergraduate/c10/inde/current/index.html. The 60.00% requirement applies to each major and minor.

Major
Semester 1
FRHD*1100 [0.50] Life: Health and Well-Being
NUTR*1010 [0.50] Introduction to Nutrition
PSYC*1000 [0.50] Introduction to Psychology
One of:
ANTH*1150 [0.50] Introduction to Anthropology
SOC*1100 [0.50] Sociology
0.50 electives

Semester 2
BIOC*2000 [0.50] Concepts in Human Physiology
FRHD*1020 [0.50] Couple and Family Relationships
MBG*1000 [0.50] Genetics and Society
One of:
FRHD*2260 [0.50] Infant Development
### Electives - Recommended and Program Options

#### Child and Youth Services
- It is highly recommended that students planning to work in child and youth services complete the following Youth stream courses:
  - FRHD*2770 [0.50]: Development in Early and Middle Childhood
  - FRHD*2280 [0.50]: Adolescent Development
  - FRHD*3250 [1.00]: Practicum I: Youth
  - FRHD*4340 [1.00]: Practicum II: Youth
  - FRHD*4400 [0.50]: Youth, Risk and Resilience

Students who intend to pursue a career in child and youth services may wish to choose electives from the following list:
- EDR*3120 [0.50]: Educational Communication
- FRHD*3090 [0.50]: Poverty and Health
- FRHD*3190 [0.50]: Administration of Programs for Children
- FRHD*4020 [0.50]: Family Therapy
- FRHD*4200 [0.50]: Issues in Human Sexuality
- FRHD*4810 [0.50]: Thesis I
- FRHD*4910 [1.00]: Thesis II
- NUTR*2050 [0.50]: Nutrition Through the Life Cycle
- PSYC*3450 [0.50]: Social and Personality Development
- PSYC*3850 [0.50]: Intellectual Disabilities
- SOAN*2290 [0.50]: Identities and Cultural Diversity
- SOC*1500 [0.50]: Crime and Criminal Justice
- SOC*3040 [0.50]: Sociology of Social Welfare

#### Early Childhood Education
Students planning to apply for membership in the College of Early Childhood Educators (CECE) need to complete the following Child stream courses:
- FRHD*2040 [0.50]: Principles of Program Design for Children
- FRHD*2260 [0.50]: Infant Development
- FRHD*2270 [0.50]: Development in Early and Middle Childhood
- FRHD*3190 [0.50]: Administration of Programs for Children
- FRHD*3200 [1.00]: Practicum I: Child
- FRHD*4210 [0.50]: Senior Seminar in Early Education and Care
- FRHD*4330 [1.00]: Practicum II: Child
- FRHD*4350 [1.00]: Practicum III: Child

Students who intend to pursue a career in early childhood education may wish to choose electives from the following list:
- ENGL*2740 [0.50]: Children's Literature
- FRHD*3090 [0.50]: Poverty and Health
- FRHD*4810 [0.50]: Thesis I
- FRHD*4910 [1.00]: Thesis II
- NUTR*2050 [0.50]: Nutrition Through the Life Cycle
- PSYC*3850 [0.50]: Intellectual Disabilities
- SOAN*2290 [0.50]: Identities and Cultural Diversity

#### Education - Primary / Junior / Intermediate

Graduates interested in elementary school teaching need additional study at a Faculty of Education. For those who wish to teach primary (junior kindergarten to grade 3) or junior (grades 4 to 6), each faculty of education may have certain required courses for admission. Often recommended are courses in visual or performing arts, mathematics, languages, physical or natural sciences, history or geography. Students interested in intermediate (grades 7 to 10) level teaching need to acquire a teachable subject in a specific discipline. Normally, this requirement consists of six semester courses in an area of concentration.

Students are strongly advised to contact the Faculties of Education that interest them early in their programs to determine the specific requirements.

#### Graduate and Professional Studies

Students have successfully used the B.A.Sc. degree to gain admission into graduate programs in social work, applied psychology, sociology, anthropology, occupational therapy, speech and language, and social policy. If you plan to enter a graduate program after completing the Child, Youth and Family major of the B.A.Sc. degree program you will need to select certain courses as part of your undergraduate program to meet graduate program admission requirements. Sometimes these requirements are quite particular which means that you must plan your course selections early and carefully. In our program you would include FRHD*4810 and FRHD*4910.

Although graduate programs differ in their entrance requirements, most graduate programs require that you have taken (at least): one course in research methods; two undergraduate statistics courses; and have completed an undergraduate thesis.

For many of the programs you will be required to take Graduate Record Exams (GREs) in the specific field of study. **You are strongly advised to contact the graduate programs that interest you early in your program to determine the specific entrance requirements of each program.**

---

### Child, Youth and Family (Co-op) (CYF:C)

#### Department of Family Relations and Applied Nutrition, College of Social and Applied Human Sciences

The Child, Youth and Family major, administered by the Department of Family Relations and Applied Nutrition, examines the psychological, social and physical conditions which influence the growth and development of children and adolescents. While the primary focus of the major is on children and youth, the program regards the family as a primary context of development and as the key to successful interventions for children with developmental, behavioural, or socio-emotional difficulties. Through the effective use of elective courses, the core requirements in the major can be supplemented to create a program of study which will prepare graduates for a variety of careers in child and youth services. Graduates are pursuing child and youth-related careers in a variety of settings including child and youth treatment facilities, elementary schools, paediatric wards in hospitals, family and community service agencies, and child care centres. Students interested in working with children ten years of age and younger may apply for membership in the College of Early Childhood Educators; see further details on required courses below. Further academic preparation may be required for certain careers. Many graduates go on to pursue graduate education in fields such as family studies, human development, psychology, counselling psychology, social work, speech pathology, and occupational therapy.

#### Program Requirements

The Co-op program in Adult Development is a four year program, including three work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: [https://www.recruitQUELP.ca/cece/](https://www.recruitQUELP.ca/cece/)). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

### Child, Youth and Family Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>Academic Semester 6</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 7</td>
<td>COOP*3000 Work Term III</td>
<td>Academic Semester 8</td>
</tr>
</tbody>
</table>

---

2019-2020 Undergraduate Calendar

Last Revision: July 4, 2019
To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

**Credit Summary (21.50 Total Credits)**

11.50 - Required Core Courses
0.50 - Restricted Electives (from lists)
8.00 – Free Electives
1.50 - Co-op Work Terms

**Note:** Three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement.

The recommended program sequence is outlined below.

### Major

#### Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRHD*1100</td>
<td>0.50</td>
<td>Life: Health and Well-Being</td>
</tr>
<tr>
<td>NUTR*1010</td>
<td>0.50</td>
<td>Introduction to Nutrition</td>
</tr>
<tr>
<td>PSYC*1000</td>
<td>0.50</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH*1150</td>
<td>0.50</td>
<td>Introduction to Anthropology</td>
</tr>
<tr>
<td>SOC*1100</td>
<td>0.50</td>
<td>Sociology</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOM*2000</td>
<td>0.50</td>
<td>Concepts in Human Physiology</td>
</tr>
<tr>
<td>FRHD*1020</td>
<td>0.50</td>
<td>Couple and Family Relationships</td>
</tr>
<tr>
<td>MBG*1000</td>
<td>0.50</td>
<td>Genetics and Society</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRHD*2260</td>
<td>0.50</td>
<td>Infant Development</td>
</tr>
<tr>
<td>FRHD*2280</td>
<td>0.50</td>
<td>Adolescent Development</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Semester 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*1100</td>
<td>0.50</td>
<td>Introduction to Co-operative Education</td>
</tr>
<tr>
<td>FRHD*2100</td>
<td>0.50</td>
<td>Development of Human Sexuality</td>
</tr>
<tr>
<td>FRHD*2110</td>
<td>0.50</td>
<td>Children and Youth with Exceptionalities</td>
</tr>
<tr>
<td>FRHD*3070</td>
<td>0.50</td>
<td>Research Methods: Family Studies</td>
</tr>
<tr>
<td>STAT*2080</td>
<td>0.50</td>
<td>Introductory Applied Statistics I</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRHD*2060</td>
<td>0.50</td>
<td>Adult Development and Aging</td>
</tr>
<tr>
<td>FRHD*2270</td>
<td>0.50</td>
<td>Development in Early and Middle Childhood</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Semester 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRHD*3150</td>
<td>0.50</td>
<td>Strategies for Behaviour Change</td>
</tr>
<tr>
<td>FRHD*3400</td>
<td>0.50</td>
<td>Communication and Counselling Skills</td>
</tr>
<tr>
<td>STAT*2090</td>
<td>0.50</td>
<td>Introductory Applied Statistics II</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRHD*2040</td>
<td>0.50</td>
<td>Principles of Program Design for Children</td>
</tr>
<tr>
<td>FRHD*2400</td>
<td>0.50</td>
<td>Introduction to Human Services</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Summer Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*1000</td>
<td>0.50</td>
<td>Co-op Work Term I</td>
</tr>
</tbody>
</table>

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*2000</td>
<td>0.50</td>
<td>Co-op Work Term II</td>
</tr>
</tbody>
</table>

#### Semester 5 - Winter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRHD*3040</td>
<td>0.50</td>
<td>Parenting and Intergenerational Relationships</td>
</tr>
<tr>
<td>FRHD*4320</td>
<td>0.50</td>
<td>Social Policies for Children, Youth and Families</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRHD*3200</td>
<td>1.00</td>
<td>Practicum I: Child</td>
</tr>
<tr>
<td>FRHD*3250</td>
<td>1.00</td>
<td>Practicum I: Youth</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Semester 6 - Summer

2.50 electives

#### Semester 7 - Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRHD*3180</td>
<td>0.50</td>
<td>Observation and Assessment Laboratory</td>
</tr>
<tr>
<td>FRHD*4310</td>
<td>0.50</td>
<td>Professional Issues</td>
</tr>
<tr>
<td>1.50 electives or restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Winter Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*3000</td>
<td>0.50</td>
<td>Co-op Work Term III</td>
</tr>
</tbody>
</table>

#### Semester 8 - Summer

2.50 electives

**Restricted Electives**

0.50 restricted electives from the Department of Family Relations and Applied Nutrition at the 4000 level (excluding FRHD*4330, FRHD*4340 or FRHD*4350).

**Education - Primary / Junior / Intermediate**

Graduates interested in elementary school teaching need additional study at a Faculty of Education. For those who wish to teach primary (grade kindergarten to grade 3) or junior (grades 4 to 6), each faculty of education may have certain required courses for admission. Often recommended are courses in visual or performing arts, mathematics, languages, physical or natural sciences, history or geography. Students interested in intermediate (grades 7 to 10) level teaching need to acquire a teachable subject in a specific discipline. Normally, this requirement consists of six semester courses in an area of concentration. Students are strongly advised to contact the Faculties of Education that interest them early in their programs to determine the specific requirements.

**Graduate and Professional Studies**

Students have successfully used the B.A.Sc. degree to gain admission into graduate programs in social work, applied psychology, sociology, anthropology, occupational therapy, speech and language, and social policy. If you plan to enter a graduate program after completing the Child, Youth and Family major of the B.A.Sc. degree program you will need to select certain courses as part of your undergraduate program to meet graduate program admission requirements. Sometimes these requirements are quite particular which means that you must plan your course selections early and carefully. In our program you would include FRHD*4810 and FRHD*4910.

Although graduate programs differ in their entrance requirements, most graduate programs require that you have taken (at least): one course in research methods; two undergraduate statistics courses; and have completed an undergraduate thesis. For many of the programs you will be required to take Graduate Record Exams (GREs) in the specific field of study. **You are strongly advised to contact the graduate programs that interest you early in your program to determine the specific entrance requirements of each program.**
Bachelor of Arts (B.A.)

The University of Guelph offers general and honors programs leading to the B.A. degree. The General Program consists of a minimum of 15.00 credits requiring the equivalent of 6 semesters of successful full-time study. The Honours Program consists of a minimum of 20.00 credits requiring the equivalent of 8 semesters of successful full-time study. A student may register in Summer, Fall and Winter semesters. The normal course load is 2.50 credits per semester for a full-time student on regular status. Students may register for 0.50 credit more at their own discretion. Part-time study consists of 1.50 credits or fewer per semester.

Program Information

A student’s selection of courses must follow the B.A. Program Regulations (including Distribution Requirements), a pattern of study for either the General or Honours degree (below), and the detailed schedule(s) of studies which follow for any special subject(s) studied.

Academic Counselling

Program Counselling

Students are urged to seek the assistance of the counsellors in the B.A. Counselling Office regarding their program and academic regulations, selecting courses, services and resources available on campus, and when they are experiencing difficulties that affect their academic progress.

Departmental Advising

Every academic department has advisors available to assist students in their course selection planning. Students should seek the advice of the faculty advisor when declaring a major, area of concentration, or minor, regarding course scheduling and completing the requirements for the specializations.

Students encountering difficulties within a course should first consult the instructor of the course. Co-operative education students in Economics and Psychology will also have a departmental Co-op Academic Advisor and Co-ordinator, and should consult Co-operative Education Services regarding scheduling work terms and the COOP*1000 course.

Academic Residence Requirements

1. At least 5.00 of the credits required for graduation by the student’s program must be taken at the University of Guelph.
2. At least 60% of the 3000 and 4000 level courses required for graduation must be taken at the University of Guelph.

University of Guelph courses include courses taken on exchange and on study abroad programs. Letter of Permission courses are not included.

Continuation of Study

Students are advised to consult the regulations for continuation of study within the program which are outlined in detail in Section VIII—Undergraduate Degree Regulations and Procedures of this calendar.

Conditions for Graduation

In addition to meeting the general and honors degree requirements listed below under Program Regulations, students will not normally be eligible to graduate while on probationary or required-to-withdraw status.

Distribution Requirements

The distribution requirements are designed to provide the student with exposure to and some understanding of a range of disciplines in the Arts, Social Sciences and Mathematical and Natural Sciences. Courses taken to satisfy the distribution requirements may also be counted toward a specialization in the general or honors program.

The B.A. Distribution Requirements (requirements 1, 2, and 3) need not be completed immediately but are a graduation requirement.

The distribution requirement of 8 courses (minimum 4.00 credits) is as follows:

1. A minimum of 1.50 credits over at least 2 different subject areas in the humanities:
   - ARTH Art History
   - CHIN Mandarin
   - CLAS Classical Studies
   - ENGL English
   - EURO European Studies
   - FREN French Studies
   - GERM German Studies
   - GREK Greek
   - HIST History
   - HUMAN Humanities
   - ITAL Italian Studies
   - LAT Latin
   - LING Linguistics
   - MUSC Music

2. A minimum of 1.50 credits over at least 2 of the following subject areas in the social sciences:
   - ANTH Anthropology
   - ECON Economics
   - GEOG Geography
   - IDEV International Development
   - ISS Interdisciplinary Social Science
   - POLS Political Science
   - PSYC Psychology
   - SOAN Sociology and Anthropology
   - SOC Sociology
   - WMST Women’s Studies

3. 1.00 credits in natural and/or mathematical sciences from the list below.

   **Natural and Mathematical Science Courses Acceptable for B.A. Distribution Requirements**

   Students must take 1.00 credits in natural and/or mathematical science courses to fulfill the B.A. science requirements. Students should choose their courses from the list below or any course for which those listed serve as prerequisites. Students are advised to fulfill this requirement before their final semester. Any problems related to this requirement should be discussed with a B.A. Program Counsellor.

   Courses recommended for students with limited preparation (e.g., lacking 4U credit in a specific area):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR*2150</td>
<td>0.50</td>
<td>Plant Agriculture for International Development</td>
</tr>
<tr>
<td>BIOL*1020</td>
<td>0.50</td>
<td>Introduction to Biology</td>
</tr>
<tr>
<td>BIOL*1500</td>
<td>0.50</td>
<td>Humans in the Natural World</td>
</tr>
<tr>
<td>BIOM*2000</td>
<td>0.50</td>
<td>Concepts in Human Physiology</td>
</tr>
<tr>
<td>BOT*1200</td>
<td>0.50</td>
<td>Plants and Human Use</td>
</tr>
<tr>
<td>CHEM*1060</td>
<td>0.50</td>
<td>Introductory Chemistry</td>
</tr>
<tr>
<td>CHEM*1100</td>
<td>0.50</td>
<td>Chemistry Today</td>
</tr>
<tr>
<td>CIS*1000</td>
<td>0.50</td>
<td>Introduction to Computer Applications</td>
</tr>
<tr>
<td>ENVS*1060</td>
<td>0.50</td>
<td>Principles of Geology</td>
</tr>
<tr>
<td>ENVS*2060</td>
<td>0.50</td>
<td>Soil Science</td>
</tr>
<tr>
<td>ENVS*2130</td>
<td>0.50</td>
<td>Eating Sustainably in Ontario</td>
</tr>
<tr>
<td>ENVS*2210</td>
<td>0.50</td>
<td>Apiiculture and Honey Bee Biology</td>
</tr>
<tr>
<td>ENVS*2270</td>
<td>0.50</td>
<td>Impacts of Climate Change</td>
</tr>
<tr>
<td>FOOD*2010</td>
<td>0.50</td>
<td>Principles of Food Science</td>
</tr>
<tr>
<td>GEOG*1300</td>
<td>0.50</td>
<td>Introduction to the Biophysical Environment</td>
</tr>
<tr>
<td>GEOG*1350</td>
<td>0.50</td>
<td>Earth: Hazards and Global Change</td>
</tr>
<tr>
<td>HORT*1120</td>
<td>0.50</td>
<td>Grape and Wine Science</td>
</tr>
<tr>
<td>HORT*1130</td>
<td>0.50</td>
<td>Science of Gardening</td>
</tr>
<tr>
<td>MBG*1000</td>
<td>0.50</td>
<td>Genetics and Society</td>
</tr>
<tr>
<td>MUSC*1090</td>
<td>0.50</td>
<td>Physics of Music</td>
</tr>
<tr>
<td>NUTR*1010</td>
<td>0.50</td>
<td>Introduction to Nutrition</td>
</tr>
<tr>
<td>PHYS*1600</td>
<td>0.50</td>
<td>Contemporary Astronomy</td>
</tr>
<tr>
<td>PHYS*1810</td>
<td>0.50</td>
<td>Physics of Music</td>
</tr>
<tr>
<td>Other acceptable courses which require 4U or university preparation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL*1XXX</td>
<td>0.00</td>
<td>Any BIOL course at the 1000 level</td>
</tr>
<tr>
<td>CHEM*1XXX</td>
<td>0.00</td>
<td>Any CHEM course at the 1000 level</td>
</tr>
<tr>
<td>CIS*1XXX</td>
<td>0.00</td>
<td>Any CIS course at the 1000 level</td>
</tr>
<tr>
<td>ENVS*2030</td>
<td>0.50</td>
<td>Meteorology and Climatology</td>
</tr>
<tr>
<td>ENVS*2250</td>
<td>0.50</td>
<td>Geology of Natural Disasters</td>
</tr>
<tr>
<td>MATH*1XXX</td>
<td>0.00</td>
<td>Any MATH course at the 1000 level</td>
</tr>
<tr>
<td>PHYS*1XXX</td>
<td>0.00</td>
<td>Any PHYS course at the 1000 level</td>
</tr>
<tr>
<td>STAT*2XXX</td>
<td>0.00</td>
<td>Any STAT course at the 2000 level</td>
</tr>
</tbody>
</table>

**Double Counting of Courses**

A maximum of 50 percent of the courses in a second specialization may be courses taken in fulfillment of the first specialization where required courses are the same. (Specializations can include majors, minors, areas of concentrations and certificates.)

**Program Regulations**

The General Degree Program provides the opportunity for a sound general education in the arts and social sciences, mathematics and sciences, while allowing for concentration of studies in one or more subjects.

The Honours Degree Program provides depth of study in one specialization, strengthening written and oral communication skills, research and analytical abilities, as well as ensuring a breadth of study in the arts, social sciences, mathematics and sciences.
General Degree Requirements (BAG)

To graduate from a general program a student must:

1. earn 15.00 credits. These must include courses that fulfill the distribution requirements (see B.A. Distribution Requirements). At least 4.00 credits must be at the 3000 level or above. Not more than 6.00 credits at the introductory (1000) level may be counted towards the 15.00 credits requirement.

2. 9.00 of the required 15.00 credits must be in courses offered by the College of Arts, the departments of Economics, Geography, Political Science, Psychology, Sociology and Anthropology (in the College of Social and Applied Human Sciences and the Gordon S. Lang School of Business and Economics), School of Computer Science, or the Department of Mathematics and Statistics.

3. no more than 11.00 credits in any one subject or discipline, as indicated by the course prefix code, can be counted towards a general degree.

While students are encouraged to complete the requirements of one or more areas of concentration, this is not a graduation requirement.

The requirements for each area of concentration are set out separately in the pages following the list of Honours and General Specializations Available in the B.A. Degree.

Honours Degree Requirements (BAH)

To graduate from an honours program a student must:

1. earn 20.00 credits. These must include courses that fulfill the distribution requirements (see B.A. Distribution Requirements), and courses that fulfill the requirements of at least 1 major. At least 7.00 credits must be at the 3000 level or above. Not more than 6.00 credits from courses at the introductory (1000) level may be counted towards the 20.00 credits requirement.

2. Honours B.A. students, except those completing a major in Food, Agricultural, and Resource Economics, must take a minimum of 12.00 credits in courses offered by the College of Arts or the departments of Economics, Geography, Political Science, Psychology, Sociology and Anthropology (in the College of Social and Applied Human Sciences and the Gordon S. Lang School of Business and Economics), the School of Computer Science or the Department of Mathematics and Statistics.

3. no more than 14.00 credits in any one subject or discipline, as indicated by the course prefix code, can be counted towards an Honours Degree.

4. fulfill the course and credit requirements of at least one major with a cumulative average of at least 70% in all course attempts at the University of Guelph in that major. Grades in all courses in the discipline area of the major are included in the cumulative average. Grades from those courses in other disciplines listed as options toward the major are also included in the average. (This condition does not apply to majors in the interdisciplinary programs of International Development and European Studies, where only courses in the core and chosen area of emphasis will be counted toward the specialization average.) Students may take more than one major. They may also take one or more minors. The 70% requirement applies to each major and minor.

The requirements for each major and minor are set out separately in the pages following the list of Honours and General Specializations Available in the B.A. Degree.

University recognition that a student has graduated with a particular major or minor requires a cumulative average of 70% for all course attempts at this University in that major or minor.

Students failing to meet the graduation requirements of the Honours Program may apply to graduate with a General Degree if the requirements for the General Degree are met. Students should note that a specialization is not required to graduate with a General Degree.

Semester One Requirements

It is recommended that students select 1000 level courses as follows:

• Required courses for a chosen or intended specialization (major, minor, area of concentration).

• Electives (this could include arts/humanities, social sciences, natural/mathematical sciences, or electives from another area).

For more information on course selection, students can access the New Student Registration Handbook at: https://www.uoguelph.ca/registrar/undergraduate/registrationhandbook/index

Special Study Options

Study at Other Universities

Students contemplating study at another university for credit towards a Bachelor of Arts degree at the University of Guelph should refer to the general regulations governing Letters of Permission in Section VIII--Degree Regulations & Procedures in this calendar.

Students must obtain approval for the Letter of Permission prior to undertaking studies at another institution. Approval of the request depends on good standing in the program with a minimum average of 60%.

The normal limit of credits taken on a Letter of Permission is 2.50 based on Guelph credits. Students with a specialization in languages who want to undertake a program of study in Quebec or abroad should consult the appropriate faculty advisor or the Director of the School of Languages and Literatures.

Study Abroad

The University of Guelph offers many other Study Abroad and Exchange opportunities for students to enrich their learning experience. Bachelor of Arts students are encouraged to participate in any of the diverse options available. Courses taken while on exchange or study abroad can be used as electives or core requirements. For further information on the programs available, please refer to Section V - International Study. Students are advised to meet with a B.A. Program Counsellor to discuss the feasibility of participating in an exchange or semester abroad.

Honours and General Specializations Available in the B.A. Degree

General Program Areas of Concentration

Anthropology

English

French Studies

Geography

History

International Development

Mathematics

Music

Philosophy

Political Science

Psychology

Sociology

Spanish and Hispanic Studies

Statistics

Theatre Studies

The schedule of studies for each area of concentration is given on the following pages under its subject heading.

Honours Program Majors

Anthropology

Art History

Classical Studies

Criminal Justice and Public Policy

Economics

English

Environmental Governance

European Studies

Food, Agricultural and Resource Economics

French Studies

Geography

History

Individual Studies

International Development

Mathematical Economics

Mathematical Science

Music

Philosophy

Political Science

Psychology

Sociology

Spanish and Hispanic Studies

Studio Art

Theatre Studies

Subjects marked with an asterisk (*) may be available as Co-operative Education programs. The schedule of studies for each major is given on the following pages under its subject heading.

Honours Program Minors

Anthropology

Art History

Arts, Culture and Heritage Management

Business

Business Economics

Classical Studies

Computing and Information Science

Creative Writing

Criminal Justice and Public Policy

Economics
English
European Culture and Civilization
Family and Child Studies
French Studies
Geography
German
History
International Development
Italian
Marketing
Mathematics
Media and Cinema Studies
Museum Studies
Music
Philosophy
Political Science
Psychology
Sociology
Statistics
Studio Art
Spanish and Hispanic Studies
Theatre Studies

The schedule of studies for each minor is given on the following pages under its subject heading.

Anthropology (ANTH)

Department of Sociology and Anthropology, College of Social and Applied Human Sciences

The Department of Sociology and Anthropology offers three types of courses: sociology courses with the prefix SOC*; anthropology courses with the prefix ANTH*; and departmental courses with the prefix SOAN*. The departmental category of courses recognizes the fact that the disciplines of sociology and sociocultural anthropology have developed in tandem and it is possible to identify large areas of overlap and convergence in the work of practitioners both historically and in the present. Departmental courses include most of the core theory and methods courses as well as many elective courses. They contribute equally to the subject matter of sociology as well as the subject matter of sociocultural anthropology for purposes of the undergraduate programs of study in both disciplines. Please see the listings for all courses required for the Anthropology program.

Courses will normally be offered in the semesters designated. Please check with the department for information about additional semester offerings. In addition to regularly scheduled courses, students may elect to do independent study. A student who wishes to do a reading course should first consult the professor with whom he/she wishes to work. Please note, a student is allowed a total of 1.00 credits only for reading courses.

SOAN courses will be used towards the Anthropology specialization.

Area of Concentration (General Program)

A minimum of 5.00 credits is required, including:

- ANTH*1150 [0.50] Introduction to Anthropology
- ANTH*2160 [0.50] Social Anthropology
- ANTH*2230 [0.50] Regional Ethnography
- ANTH*3690 [0.50] Engaging Anthropological Theory
- ANTH*3770 [0.50] Kinship, Family, and Power
- SOAN*2120 [0.50] Introductory Methods

One of:

- MUSC*2270 [0.50] World Music
- PHIL*2100 [0.50] Critical Thinking

1.00 additional credits in ANTH
0.50 additional credits in SOAN

Note: 1.00 credits of these additional credits must be completed at the 3000 level or above.

Major (Honours Program)

A minimum of 9.00 credits is required, including:

- ANTH*1150 [0.50] Introduction to Anthropology
- ANTH*2160 [0.50] Social Anthropology
- ANTH*2230 [0.50] Regional Ethnography
- ANTH*3690 [0.50] Engaging Anthropological Theory
- ANTH*3770 [0.50] Kinship, Family, and Power
- ANTH*4700 [0.50] Issues in Contemporary Anthropological Theory
- SOAN*2120 [0.50] Introductory Methods
- SOAN*3070 [0.50] Qualitative and Observational Methods
- LING*1000 [0.50] Introduction to Linguistics
- MUSC*2270 [0.50] World Music

PHIL*2100 [0.50] Critical Thinking
2.00 additional credits in ANTH
2.00 additional credits in SOAN

Note: 1.00 of these additional credits must be completed at the 4000 level.
Note: SOAN*3120 is recommended, especially for students planning to enter graduate programs.

Minor (Honours Program)

A minimum of 5.00 credits is required, including:

- ANTH*1150 [0.50] Introduction to Anthropology
- ANTH*2160 [0.50] Social Anthropology
- ANTH*2230 [0.50] Regional Ethnography
- ANTH*3690 [0.50] Engaging Anthropological Theory
- ANTH*3770 [0.50] Kinship, Family, and Power
- SOAN*2120 [0.50] Introductory Methods

One of:

- MUSC*2270 [0.50] World Music
- PHIL*2100 [0.50] Critical Thinking

1.00 additional credits in ANTH
0.50 additional credits in SOAN

Note: 1.00 of these additional credits must be completed at the 3000 level or above.

Art History (ARTH)

School of Fine Art and Music, College of Arts

The School provides for concentrated study in Art History or Studio Arts, or for a more balanced study combining the two disciplines. Both Studio Art and Art History degree programs require some work in both the programs. Many Art History courses are also open to non specialized students.

The Art History program covers historical perspectives on the visual arts, study of the methodologies of art history and critical theory, and consideration of contemporary issues in the practice and display of art. Students pursuing a Major or Minor in Art History are required to take a minimum number of courses at the 2000, 3000 and 4000 level.

Students majoring in other programs who are also interested in the study of Art History are encouraged to consider the Minor offered in Museum Studies. Specific requirements for the Art History Honours Major and Minor are listed below.

Student Counselling

The students who elect to take a substantial number of courses in Art History with the objective of graduate work are advised to obtain counselling from faculty regarding their choices. It is important to know that graduate studies in Art History will usually require a reading knowledge of at least 2 languages other than English. German, French, Italian and Latin are among the most useful choices. Cognate electives in other disciplines in the College of Arts (such as History) will almost certainly prove an asset.

Major (Honours Program)

A minimum of 9.00 credits is required, including:

- ARTH*1510 [0.50] Art Historical Studies I
- ARTH*1520 [0.50] Art Historical Studies II
- ARTH*2220 [0.50] The Visual Arts Today
- ARTH*2480 [0.50] Introduction to Art Theory and Criticism
- ARTH*2540 [0.50] Medieval Art
- ARTH*2550 [0.50] The Italian Renaissance
- ARTH*2600 [0.50] Early Modern Art

1.50 credits from:

- ARTH*2050 [0.50] Modern Latin American Art
- ARTH*2060 [0.50] Aboriginal Arts in the Americas
- ARTH*2070 [0.50] Art of the USA
- ARTH*2120 [0.50] Introduction to Museology
- ARTH*2150 [0.50] Art and Archaeology of Greece
- ARTH*2280 [0.50] Modern Architecture
- ARTH*2290 [0.50] History of Photographic Media
- ARTH*2490 [0.50] History of Canadian Art
- ARTH*2580 [0.50] Late Modern Art: 1900-1950
- ARTH*2950 [0.50] Baroque Art

2.00 credits from:

- ARTH*3010 [0.50] Contemporary Canadian Art
- ARTH*3060 [0.50] Public Art
- ARTH*3360 [0.50] Space: Roman Art and Urbanism
- ARTH*3380 [0.50] Colour: Practice & Meanings in Western Art
- ARTH*3390 [0.50] Critical Issues in Art History
- ARTH*3320 [0.50] Nationalism & Identity in Art
- ARTH*3330 [0.50] Lives: Aspects of Western Art
- ARTH*3340 [0.50] Display: Visual Culture in Western Europe
- ARTH*3350 [0.50] Studies in Renaissance and Baroque Art
- ARTH*3520 [0.50] Idea: Art Since 1950
- ARTH*3600 [0.50] Topics in the Long Eighteenth Century
- ARTH*3620 [0.50] Museum Studies
- ARTH*3780 [0.50] Gender and Art
Minor (Honours Program)

A minimum of 5.00 credits is required, including:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH*4310</td>
<td>Topics in Art &amp; Visual Culture I</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ARTH*4320</td>
<td>Topics in Art &amp; Visual Culture II</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ARTH*4330</td>
<td>Topics in Art &amp; Visual Culture III</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ARTH*4340</td>
<td>Topics in Art &amp; Visual Culture IV</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ARTH*4350</td>
<td>Topics in Art &amp; Visual Culture V</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

Students may count either ARTH*4600 "Individual Study: Art History" or ARTH*4800 "Experiential Learning" towards their major. Neither of these courses meets the requirement of 2.00 credits from seminar courses.

Arts, Culture and Heritage Management (ACHM)

This minor prepares students for careers in the management of the artistic and cultural sectors. By examining arts, culture and heritage institutions, business models and consumer trends, students develop and demonstrate an understanding of the relationship between culture and society, cultural economies and the arts both globally and in the Canadian context. Attention is given to visual culture, film and theatre, sound/ music, heritage, management, law, marketing, communications and ethics. The experiential component allows students to gain practical experience in the field of their choice. The minor in Arts, Culture and Heritage Management guides students to an understanding of the pertinent questions at stake in today’s entrepreneurial and diverse cultural environments.

Minor (Honours Program)

A minimum of 5.00 credits is required including:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMN*1100</td>
<td>Fundamentals of Arts Management I</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HUMN*1200</td>
<td>Fundamentals of Arts Management II</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*2010</td>
<td>Foundations of Leadership</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MGMT*2150</td>
<td>Introduction to Canadian Business Management</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

Notes:

- BComm students interested in this minor must substitute MGMT*2150 with 0.50 additional credits in Art History including at least 2.00 credits at the 3000 or 4000 level.
- 4.00 additional credits in Art History including at least 2.00 credits at the 3000 or 4000 level.
- 1.00 credit from Arts and Culture.
- ANTH*2660 | Contemporary Indigenous Peoples in Canada | [0.50] |
- ANTH*3650 | The Anthropology of Indigenous Peoples Before Canada | [0.50] |
- ART*2060 | Aboriginal Arts in the Americas | [0.50] |
- ARTH*2120 | Introduction to Museology | [0.50] |
- ARTH*2220 | The Visual Arts Today | [0.50] |
- ARTH*2220 | History of Photographic Media | [0.50] |
- ART*3010 | Contemporary Canadian Art | [0.50] |
- ART*3060 | Public Art | [0.50] |
- ARTH*3520 | Idea: Art Since 1950 | [0.50] |
- ART*3620 | Museum Studies | [0.50] |
- ENGL*3380 | Studies in the History of Literary Production | [0.50] |
- EURO*1100 | European Cinema | [0.50] |
- FREN*3140 | Women in Literature, Art and Film | [0.50] |
- FREN*3160 | Songs, Lyrics and Poetry in French | [0.50] |
- HIST*3260 | Cinema and the Moving Image | [0.50] |
- HIST*3450 | The Uses of History | [0.50] |
- MUSC*2030 | Music in Canada | [0.50] |
- MUSC*2150 | Music and Popular Culture | [0.50] |
- MUSC*2270 | World Music | [0.50] |
- SART*1150 | Contemporary Artistic Practice | [0.50] |
- THST*2500 | Contemporary Cinema | [0.50] |
- THST*3530 | Canadian Cinema | [0.50] |
- THST*4240 | Theatrical Organization and Culture | [0.50] |
- WMST*2000 | Women and Representation | [0.50] |

1.00 credit from Organizational Management

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT*1220</td>
<td>Introductory Financial Accounting</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ACCT*2230</td>
<td>Management Accounting</td>
<td>[0.50]</td>
</tr>
<tr>
<td>EDRD*4210</td>
<td>Leadership Development in Small Organizations</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*2090</td>
<td>Leadership Development in Small Organizations</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*3010</td>
<td>Compensation Systems</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*3020</td>
<td>Employment Law</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*3070</td>
<td>Recruitment and Selection</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*3090</td>
<td>Training and Development</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*3100</td>
<td>Developing Management and Leadership Competencies</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*4060</td>
<td>Human Resource Planning</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*2010</td>
<td>Foundations of Leadership</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*2200</td>
<td>Labour Relations</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*2290</td>
<td>Human Resources Management</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HMTM*3120</td>
<td>Service Operations Analysis</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MCS*2020</td>
<td>Information Management</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MCS*2100</td>
<td>Personal Financial Management</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MCS*2600</td>
<td>Fundamentals of Consumer Behaviour</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MCS*3000</td>
<td>Advanced Marketing</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

Business (BUS)

Department of Management, Gordon S. Lang School of Business and Economics

The study of business is complementary to virtually any career or professional endeavour. The minor in Business is intended to enhance the business literacy of non-business students. Through a combination of core and elective courses, students from different disciplines will develop foundational knowledge and understanding of the core functional areas of business, and be invited to explore and apply this in relation to their primary area of study.

Note: The minor in Business is not open to students enrolled in the Bachelor of Commerce program.

Minor (Honours Program)

A minimum of 5.00 credits is required (all 3.00 required credits, plus 2.00 credits of restricted electives of which at least 1.00 credits must be at the 3000 level or above).

Required courses (3.00 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT*1220</td>
<td>Introductory Financial Accounting</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ECON*1100</td>
<td>Introductory Microeconomics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*2090</td>
<td>Individuals and Groups in Organizations</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MGMT*2150</td>
<td>Introduction to Canadian Business Management</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MGMT*3020</td>
<td>Corporate Social Responsibility</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

Restricted Electives (2.00 credits of which at least 1.00 credits are at the 3000 level or above):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT*2230</td>
<td>Management Accounting</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ECON*1100</td>
<td>Introductory Microeconomics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ECON*2720</td>
<td>Business History</td>
<td>[0.50]</td>
</tr>
<tr>
<td>EDRD*3140</td>
<td>Organizational Communication</td>
<td>[0.50]</td>
</tr>
<tr>
<td>EDRD*3160</td>
<td>International Communication</td>
<td>[0.50]</td>
</tr>
<tr>
<td>EDRD*4120</td>
<td>Leadership Development in Small Organizations</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENGG*3240</td>
<td>Engineering Economics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENGG*4050</td>
<td>Quality Control</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENGG*4070</td>
<td>Life Cycle Assessment for Sustainable Design</td>
<td>[0.50]</td>
</tr>
<tr>
<td>FARE*3030</td>
<td>The Firm and Markets</td>
<td>[0.50]</td>
</tr>
<tr>
<td>FARE*3310</td>
<td>Operations Management</td>
<td>[0.50]</td>
</tr>
<tr>
<td>FARE*3460</td>
<td>Marketing Research</td>
<td>[0.50]</td>
</tr>
<tr>
<td>FARE*4370</td>
<td>Food &amp; Agri Management Management</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*2010</td>
<td>Foundations of Leadership</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*2200</td>
<td>Labour Relations</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HROB*2290</td>
<td>Human Resources Management</td>
<td>[0.50]</td>
</tr>
<tr>
<td>HMTM*3120</td>
<td>Service Operations Analysis</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MCS*2020</td>
<td>Information Management</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MCS*2100</td>
<td>Personal Financial Management</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MCS*2600</td>
<td>Fundamentals of Consumer Behaviour</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MCS*3000</td>
<td>Advanced Marketing</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MCS*3040</td>
<td>Business and Consumer Law</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MGMT*3320</td>
<td>Financial Management</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MGMT*4050</td>
<td>Business Consulting</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MGMT*4060</td>
<td>Business Consulting</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHIL*2600</td>
<td>Business and Professional Ethics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>POLS*2250</td>
<td>Public Administration and Governance</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>
### Minor (Honours Program)

A minimum of 5.00 credits is required, including:

- a. The Classical Studies Core
- b. two of CLAS*4000, CLAS*4150, CLAS*4400

### Computing and Information Science (CIS)

#### School of Computer Science, College of Engineering and Physical Sciences

A knowledge of Computing is a complement to most areas of study. The Minor in Computing and Information Science is directed towards students who wish to supplement their studies in another area with some experience in Computing. Students interested in pursuing a Major in Computing can do so through the Bachelor of Computing Degree Program.

#### Minor (Honours Program)

A minimum of 5.00 credits is required, including:

- CIS*1300 [0.50] Programming
- CIS*1910 [0.50] Discrete Structures in Computing I
- CIS*2170 [0.75] User Interface Design
- CIS*2430 [0.50] Object Oriented Programming
- CIS*2500 [0.50] Intermediate Programming
- CIS*2520 [0.50] Data Structures
- CIS*2750 [0.75] Software Systems Development and Integration

0.50 additional credits from CIS courses at the 2000 level or above

0.50 additional credits from CIS courses at the 3000 level or above

#### Creative Writing (CW)

The Creative Writing minor reflects the significant role that creative writing plays in our cultural life, from travel writing and blogs, gaming and journalism, to poems, novels and films. The minor honours students’ skills in expressive writing, and teaches students to situate their work within a broader context of local, global and historical creative texts. Workshops and a capstone seminar provide students with the opportunity to revise their work and develop a creative portfolio.

#### Minor (Honours Program)

A minimum of 5.00 credits is required including:

- ENGL*1080 [0.50] Literatures in English I: Reading the Past
- ENGL*2920 [0.50] Elements of Creative Writing
- ENGL*4720 [1.00] Creative Writing: Prose/Poetry

1.00 credit from the following:

- ENGL*3050 [0.50] Intermediate Fiction Writing Workshop
- ENGL*3060 [0.50] Intermediate Poetry Writing Workshop
- ENGL*3070 [0.50] Intermediate Screenwriting Workshop
- ENGL*3090 [0.50] Special Topics in Creative Writing Workshop
- THST*2120 [0.50] Writing for Performance

2.00 credits from the following:

- CLAS*2000 [0.50] Classical Mythology
- CLAS*3030 [0.50] Epic Heroes and Poems
- ENGL*2040 [0.50] Latina/o Literature and Cultural Production: Intro
- ENGL*2080 [0.50] Literatures in English II: Finding a Critical Voice
- ENGL*2090 [0.50] Studies in Shakespeare
- ENGL*2120 [0.50] Seminar: Critical Practices
- ENGL*2130 [0.50] Seminar: Literature and Social Change
- ENGL*2190 [0.50] Queer Literatures and Cultures
- ENGL*2200 [0.50] Postcolonial Literatures, Film, and Other Media
- ENGL*2260 [0.50] Law and Literature
- ENGL*2270 [0.50] Fairy, Trickster, and Mythical Hero
- ENGL*2280 [0.50] Sporting Bodies
- ENGL*2290 [0.50] Outlaws
- ENGL*2310 [0.50] Vampires, Ghosts, and Mummies: Literature and the Supernatural
- ENGL*2330 [0.50] Print Culture and Cinema
- ENGL*2360 [0.50] Medieval Literature
- ENGL*2550 [0.50] North American Native Literatures
- ENGL*2640 [0.50] Culture, Location, Identity: Minoritized Literatures in Canada and Beyond
- ENGL*2740 [0.50] Children's Literature
- ENGL*2880 [0.50] Women in Literature
- ENGL*3080 [0.50] History and Linguistics of the English Language
- ENGL*3240 [0.50] Studies in Early Modern Literature and Culture
- ENGL*3380 [0.50] Studies in the History of Literary Production
- ENGL*3420 [0.50] 20th- & 21st-Century Drama
- ENGL*3460 [0.50] Literature in London
- ENGL*3470 [0.50] Twentieth-Century British Literature I
- ENGL*3480 [0.50] Twentieth-Century British Literature II
- ENGL*3540 [0.50] Writing the United States
X. Degree Programs, Bachelor of Arts (B.A.)

ENGL*3550 [0.50] Modern United States Literatures
ENGL*3680 [0.50] 20th & 21st-Century Canadian Literature and Criticism
ENGL*3750 [0.50] Studies in Postcolonial Literatures
ENGL*3760 [0.50] The Atlantic World
ENGL*3870 [0.50] Topics in Literary and Cultural Studies
ENGL*3880 [0.50] Topics in Literary and Cultural Studies
FREN*2020 [0.50] France: Literature and Society
FREN*2060 [0.50] Quebec: Literature and Society
FREN*3030 [0.50] Good and Evil
FREN*3090 [0.50] Classics of French Literature
FREN*3110 [0.50] Storytelling in the Francophone World
FREN*3130 [0.50] Representing the Self
FREN*3140 [0.50] Women in Literature, Art and Film
FREN*3160 [0.50] Songs, Lyrics and Poetry in French
FREN*3170 [0.50] Fictions of Childhood
GERM*3020 [0.50] Myth and Fairy Tales in Germany
GERM*3470 [0.50] Holocaust & WWII in German Lit. & Film
HUMN*1030 [0.50] What Makes a Literary Classic?
HUMN*3000 [0.50] Narratives of Migration
HUMN*3020 [0.50] Myth and Fairy Tales in Germany
HUMN*3400 [0.50] Renaissance Lovers and Lovers
ITAL*3400 [0.50] Renaissance Lovers and Lovers
SPAN*2990 [0.50] Hispanic Literary Studies
SPAN*3220 [0.50] Literature and Arts I: Spain
SPAN*3230 [0.50] Literature and Arts II: Latin America

Students with a compelling reason to work in a genre other than prose or poetry at the
4000 level may substitute ENGL*4810 and ENGL*4910 for ENGL*4720 with the faculty
advisor's permission.

Note: Substituted courses may have their own prerequisites; check the course descriptions
in the academic calendar.

Criminal Justice and Public Policy (CJPP)

Department of Sociology and Anthropology, and the Department of Political Science,
College of Social and Applied Human Sciences

Criminal Justice and Public Policy is offered as a minor in the honors program and as a
major in the honors program. It is designed to provide students seeking a career in the
criminal justice system, or planning to pursue an advanced degree with a knowledge base
that will enable them to pursue their career objectives. The program offers a unique blend
of sociological courses dealing with the criminal justice system as well as courses in
Political Science dealing with public policy formation and implementation. It also provides
students with the conceptual and methodological tools needed for further study.

Students who are not admitted directly into the CJPP major and subsequently wish to
declare the specialization must apply directly to the department. In order to be eligible,
aplicants must have a cumulative average of 70% or better in the following foundation
courses:

- POLS*1400 [0.50] Issues in Canadian Politics
- POLS*2250 or POLS*2300
- POLS*2350 [0.50] Law from a Political Science Perspective
- SOAN*2120 [0.50] Introductory Methods
- SOC*1500 [0.50] Crime and Criminal Justice
- SOC*2700 [0.50] Criminological Theory

Students wishing to declare the CJPP minor also meet the above requirement.

Students from other institutions who transfer to the University of Guelph and wish to
declare the CJPP major or minor must also meet the above requirement. If an external
transfer student is granted credit for one or more of the foundation courses listed above,
then he or she must attain a cumulative average of 70% or better in the remaining required
CJPP foundation courses.

Major (Honours Program)

A minimum of 9.00 credits is required, including:

- PHIL*1010 [0.50] Introductory Philosophy: Social and Political Issues
- POLS*1400 [0.50] Issues in Canadian Politics
- POLS*2250 or POLS*2300
- POLS*2350 [0.50] Law from a Political Science Perspective
- SOAN*2120 [0.50] Introductory Methods
- SOC*1500 [0.50] Crime and Criminal Justice
- SOC*2700 [0.50] Criminological Theory

0.50 credits from the following:

- POLS*3650 [0.50] Quantitative Methods of Data Analysis
- SOAN*3120 [0.50] Quantitative Methods

1.50 credits from the following:

- SOC*2070 [0.50] Social Deviance
- SOC*2760 [0.50] Homicide
- SOC*3490 [0.50] Law and Society
- SOC*3710 [0.50] Youth Justice
- SOC*3730 [0.50] Courts and Society
- SOC*3740 [0.50] Corrections and Penology

SOC*3750 [0.50] Police in Society

1.50 credits from the following:

- POLS*3130 [0.50] Law, Politics and Judicial Process
- POLS*3140 [0.50] Canadian Charter of Rights and Freedoms
- POLS*3210 [0.50] The Constitution and Canadian Federalism
- POLS*3250 [0.50] Public Policy: Challenges and Prospects
- POLS*3300 [0.50] Governing Criminal Justice
- POLS*3440 [0.50] Corruption, Scandal and Political Ethics
- POLS*3670 [0.50] Comparative Public Policy and Administration

0.50 credits from the following:

- HIST*3130 [0.50] Popular Culture and Punishment, 1700-1900
- PHIL*3040 [0.50] Philosophy of Law
- PHIL*3230 [0.50] Theories of Justice
- PSYC*3020 [0.50] Psychology of Law

1.50 credits from the following:

- POLS*4050 [1.00] Advanced Topics in Law and Politics
- POLS*4060 [0.50] Advanced Topics Lecture in Law and Politics
- POLS*4070 [1.00] Courts and Parliament
- POLS*4100 [1.00] Women, Justice and Public Policy
- POLS*4160 [1.00] Multi-Level Governance in Canada
- POLS*4250 [1.00] Topics in Public Management
- POLS*4260 [1.00] Topics in Public Policy
- POLS*4270 [0.50] Advanced Lecture in Public Management
- POLS*4280 [0.50] Advanced Lecture in Public Policy
- POLS*4310 [0.50] Advanced Lecture in Women, Justice and Public Policy
- POLS*4740 [1.00] Advanced Topics in Rights and Liberties
- POLS*4780 [1.00] Advanced Lecture in Rights and Liberties
- POLS*4970 [0.50] Honours Political Science Research I
- POLS*4980 [0.50] Honours Political Science Research II
- SOC*4010 [0.50] Violence and Society
- SOC*4030 [0.50] Advanced Topics in Criminology
- SOC*4200 [0.50] Advanced Topics in Criminal Justice
- SOC*4900 [0.50] Honours Sociology Thesis I
- SOC*4910 [0.50] Honours Sociology Thesis II

Minor (Honours Program)

A minimum of 5.00 credits is required, including:

- PHIL*1010 [0.50] Introductory Philosophy: Social and Political Issues
- POLS*1400 [0.50] Issues in Canadian Politics
- POLS*2250 or POLS*2300
- POLS*2350 [0.50] Law from a Political Science Perspective
- SOAN*2120 [0.50] Introductory Methods
- SOC*1500 [0.50] Crime and Criminal Justice
- SOC*2700 [0.50] Criminological Theory

1.50 credits from the following list, including 0.50 SOC and 0.50 POLS:

- POLS*3130 [0.50] Law, Politics and Judicial Process
- POLS*3210 [0.50] The Constitution and Canadian Federalism
- POLS*3300 [0.50] Governing Criminal Justice
- POLS*3250 [0.50] Public Policy: Challenges and Prospects
- POLS*3440 [0.50] Corruption, Scandal and Political Ethics
- POLS*3670 [0.50] Comparative Public Policy and Administration
- SOC*2070 [0.50] Social Deviance
- SOC*2760 [0.50] Homicide
- SOC*3490 [0.50] Law and Society
- SOC*3710 [0.50] Youth Justice
- SOC*3730 [0.50] Courts and Society
- SOC*3740 [0.50] Corrections and Penology
- SOC*3750 [0.50] Police in Society

Economics (ECON)

Department of Economics and Finance, Gordon S. Lang School of Business and Economics

The Department of Economics and Finance offers courses in economic theory, applied
economics and quantitative methods. Students may take courses leading to a B.A. in the
honours. It is possible to combine Economics with various other disciplines such as
mathematics and statistics, business administration, political science, geography and
history. Students are urged to consult the department's program planning guide and the
department's advisors for detailed information about courses and programs and the course
of study most appropriate as preparation for graduate work in economics or business
administration, for professional degrees such as the Bachelor's degree in Law, and for
careers in business and government.

Core Requirements

ECON*1050 [0.50] Introductory Microeconomics
ECON*1100 [0.50] Introductory Macroeconomics
ECON*2310 [0.50] Intermediate Microeconomics
ECON*2410 [0.50] Intermediate Macroeconomics
One of:
MATH*1030 [0.50] Business Mathematics
MATH*1080 [0.50] Elements of Calculus I
MATH*1200 [0.50] Calculus I

**Major (Honours Program)**

A minimum of 9.50 credits in Economics is required, including:

- The Economics core requirements
  - ECON*2740 [0.50] Economic Statistics
  - ECON*2770 [0.50] Introductory Mathematical Economics
  - ECON*3710 [0.50] Advanced Microeconomics
  - ECON*3740 [0.50] Introduction to Econometrics
  - ECON*3810 [0.50] Advanced Macroeconomics
  - ECON*4710 [0.50] Advanced Topics in Microeconomics
  - ECON*4810 [0.50] Advanced Topics in Macroeconomics
  - ECON*2720 [0.50] Business History
  - ECON*3730 [0.50] The Origins of International Inequality
  - ECON*4720 [0.50] Topics in Economic History

3.00 additional credits in Economics at the 3000 or 4000 level, at least 1.50 of which must be at the 4000 level

**Note:** Students contemplating graduate studies in Economics should take ECON*4640, Advanced Econometrics and ECON*4840, Financial Econometrics.

**Minor (Honours Program)**

A minimum of 5.00 credits in Economics is required, including:

- The Economics core
  - ECON*2560 [0.50] Introduction to Finance
  - ECON*2740 [0.50] Economic Statistics
  - ECON*2770 [0.50] Introductory Mathematical Economics

- 2.00 other credits in Economics at the 3000 or 4000 level

**Notes:**
1. ECON*3740 is recommended.
2. Students wishing to pursue a more structured Economics minor should take ECON*3710 as well as ECON*3740.

**Economics (Co-op) (ECON:C)**

Department of Economics and Finance, Gordon S. Lang School of Business and Economics

The Economics Co-op program provides an integrated academic/work experience for students with co-operating employer organizations. Students in the program complete 4-5 work terms while fulfilling the requirements of their honours Economics program.

All co-op students must complete the Economics core plus an introductory computer science course (CIS*), ECON*2770 and ECON*3740 in their first 4 semesters. Admission to the co-op program is limited to students of high academic standing and will be considered only at semester 1 entry or at the end of semester 2. The first 2 work terms normally follow completion of the first 4 semesters of academic study. Students will only be permitted to take these work terms if they are eligible to continue in the Honours Economics program, have completed the required courses and are maintaining a satisfactory standing in their Economics program. The 3rd and 4th work terms will normally follow the 6th academic semester. For further information on the Economics Co-op program students are urged to consult the department's Program Guide and Co-operative Education Programs in Section X-degree Programs in this calendar.

Students should review the Economics section in the schedule of studies for additional program information.

**Program Requirements**

The Co-op program in Economics is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

**Economics Academic and Co-op Work Term Schedule**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>Academic Semester 4</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>COOP*4000 Work Term IV</td>
<td>COOP*5000 Work Term V</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

**Credit Summary (22.00 Total Credits)**

9.50 - Required Core Courses
- 1.50 - Humanities credits from at least two subject areas (BA distribution requirement)
- 0.50 - Social Science credit outside of ECON (BA distribution requirement)
- 8.50 – Electives
- 2.00 - Co-op Work Terms

**Note:** A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. A fifth Co-op work term is optional and if completed, the total number of credits will equal 22.50

The recommended program sequence is outlined below.

**Major (Honours Program)**

**Semester 1**

- ECON*1050 [0.50] Introductory Microeconomics
  - One of:
    - Math*1000 0.50 Introductory Calculus
    - MATH*1030 [0.50] Business Mathematics
    - MATH*1080 [0.50] Elements of Calculus I
    - MATH*1200 [0.50] Calculus I
  - 1.50 electives

**Semester 2 (Winter)**

- ECON*1100 [0.50] Introductory Macroeconomics
  - One computer science course
  - 1.50 electives

**Summer Semester**

Optional -- at the discretion of the student.

**Semester 3 (Fall)**

- COOP*1100 [0.50] Introduction to Co-operative Education
- ECON*2310 [0.50] Intermediate Microeconomics
- ECON*2410 [0.50] Intermediate Macroeconomics
- ECON*2740 [0.50] Economic Statistics
- ECON*2770 [0.50] Introductory Mathematical Economics
  - 0.50 electives

**Semester 4 (Winter)**

- ECON*3740 [0.50] Introduction to Econometrics
  - One economic history course*
  - 1.50 electives

**Summer Semester**

Optional -- at the discretion of the student.

**Semester 5 (Winter)**

- ECON*3810 [0.50] Advanced Macroeconomics
  - 1.00 credits in Economics at the 3000 level
  - 1.00 electives

**Summer Semester**

- ECON*3000 [0.50] Co-op Work Term III

**Semester 6 (Fall)**

- ECON*3710 [0.50] Advanced Microeconomics
  - 0.50 credits in Economics at the 4000 level (ECON*4640 is recommended)
  - 1.50 electives

**Winter Semester**

- ECON*4710 [0.50] Advanced Topics in Microeconomics
  - 0.50 credits in Economics at the 4000 level
  - 1.00 electives
  - 0.50 restricted electives

**Semester 8 (Winter)**

- ECON*4810 [0.50] Advanced Topics in Macroeconomics
  - 0.50 credits in Economics at the 4000 level
  - 1.50 electives
The M.A. program in English at Guelph gives preference to qualified applicants with a broad experience in literary and cultural studies and related disciplines.

Minor (Honours Program)
The program of study and requirements are the same as for the Area of Concentration in the General Program.

Environmental Governance (EGOV)

Department of Geography, Environment and Geomatics, College of Social and Applied Human Sciences

Environmental governance refers to the processes through which societies make decisions that affect the environment. Governments have long been dominant players in this context. However, in Canada and around the world, the ability of governments alone to address environmental problems is being called into question. As a result, contemporary environmental governance increasingly involves citizens, non-government organizations, and businesses.

The Major in Environmental Governance introduces students to the challenges of environmental governance. Through completing courses from the disciplines of geography, political science, agricultural economics, and economics, students will receive a solid foundation in the processes and mechanisms of environmental governance in Canada and elsewhere; an understanding of geographical, political, and economic factors that shape governance in Canada and around the world; and exposure to innovative approaches to environmental governance that address persistent and emerging societal concerns. Students completing the major will have the skills and experiences needed to participate effectively in environmental governance in a variety of settings. Hence, they will find careers in the public sector, in environmental non-government organizations, and, increasingly, in the private sector.

Completion of required courses, and careful selection from among optional courses, will facilitate students completing a minor in Geography, Political Science, or Economics. Minors in other programs also may complement the Major in Environmental Governance.

Major (Honours Program)

A minimum of 11.50 credits, consisting of 11.00 credits from the courses specified below, plus 0.50 credits from other 4000 level courses in Geography; Political Science; Food, Agricultural, and Resource Economics (Agricultural Economics); or Economics:
European Culture and Civilization (ECC)

The minor in European Culture and Civilization is designed for students interested in the interdisciplinary study of European culture and history. If offers a combination of languages, history of European culture, literature, the arts, philosophy, history and political science.

Note: the minor is not open to European Studies majors.

Minor (Honours Program)

Note: some of the courses below (the language courses, some 3000 and 4000 level courses in lists A, B, C, D) have prerequisites not included in the minor.

A minimum of 5.00 credits, at least 1.00 of which must be at the 3000 level or above, is required, including:

1. EURO*1100 [0.50] European Cinema
   EURO*2200 [0.50] Towards European Modernism
   EURO*3300 [0.50] Violence and Culture

2. 2.00 credits in one language chosen from the following list:
   
   FREN*1200 [0.50] French Language I
   FREN*1300 [0.50] French Language II
   FREN*2020 [0.50] France: Literature and Society
   FREN*2500 [0.50] French Translation I
   FREN*2520 [0.50] French Composition I
   FREN*2550 [0.50] Contemporary France
   FREN*3090 [0.50] Classics of French Literature
   FREN*3500 [0.50] French Translation II
   FREN*3520 [0.50] French Composition II

   OR

   GERM*1100 [0.50] Introductory German I
   GERM*1110 [0.50] Introductory German II
   GERM*2010 [0.50] Intermediate Language Practice
   GERM*2490 [0.50] Intermediate German
   GERM*3150 [0.50] Interactive German Language and Culture

   OR

   HUMN*2020 [0.50] The Criminal Mind in Italian Cinema
   ITAL*1060 [0.50] Introductory Italian I
   ITAL*1070 [0.50] Introductory Italian II
   ITAL*2090 [0.50] Intermediate Italian
   ITAL*3400 [0.50] Renaissance Lovers and Fools
   ITAL*3700 [0.50] Experimental Learning and Language

   OR

   SPAN*1100 [0.50] Introductory Spanish I
   SPAN*1110 [0.50] Introductory Spanish II
   SPAN*2000 [0.50] Intermediate Spanish I
   SPAN*2010 [0.50] Intermediate Spanish II
   SPAN*2040 [0.50] Culture of Spain
   SPAN*2990 [0.50] Hispanic Literary Studies
   SPAN*3220 [0.50] Literature and Arts I: Spain
   SPAN*3500 [0.50] Advanced Spanish I

3. 1.50 credits; 0.50 credits from three of the following Groups A, B, C and D from the following list:

   **Group A**
   
   HIST*1010 [0.50] Early Modern Europe
   HIST*2200 [0.50] The Medieval World
   HIST*2510 [0.50] Modern Europe Since 1789
   HIST*2820 [0.50] Modern France Since 1750
   HIST*3230 [0.50] Spain and Portugal, 1085 to 1668
   HIST*3350 [0.50] Modern Germany
   HIST*3570 [0.50] Women in Modern Europe
   HIST*3750 [0.50] The Reformation
   HIST*3820 [0.50] Early Modern France
   HIST*4090 [1.00] Modern European History
   HIST*4470 [0.50] Special History Project Seminar I
   HIST*4580 [1.00] The French Revolution

   **Group B**
   
   PHIL*2140 [0.50] Ancient Greek Philosophy
   PHIL*2160 [0.50] Early Modern Philosophy: Reason vs. Experience
   PHIL*3060 [0.50] Medieval Philosophy
   PHIL*3100 [0.50] Kant and His Legacy
   PHIL*3200 [0.50] Continental Philosophy
   PHIL*3360 [0.50] Nineteenth Century Philosophy
   POLS*2000 [0.50] Political Theory
   POLS*2100 [0.50] Comparative Politics
   POLS*2200 [0.50] International Relations

   **Group C**
   
   CLAS*1000 [0.50] Introduction to Classical Culture
   CLAS*2000 [0.50] Classical Mythology
   CLAS*2350 [0.50] The Classical Tradition
   EURO*3000 [0.50] Revolution and the Fantastic in European Culture
   EURO*4050 [0.50] Contemporary Europe. New Landscapes in the Post-Cold War Era
   FREN*3030 [0.50] Good and Evil
   FREN*3110 [0.50] Storytelling in the Francophone World
   FREN*3140 [0.50] Women in Literature, Art and Film
   FREN*3160 [0.50] Songs, Lyrics and Poetry in French
   FREN*3170 [0.50] Fictions of Childhood
   HIST*2850 [0.50] Ancient Greece and Rome
   HUMN*1030 [0.50] What Makes a Literary Classic?
   HUMN*3000 [0.50] Narratives of Migration
   HUMN*3020 [0.50] Myth and Fairy Tales in Germany
   HUMN*3400 [0.50] Renaissance Lovers and Fools
   HUMN*3470 [0.50] Holocaust & WWII in German Lit. & Film

Note: Other Spanish literature courses may be counted in this section provided the course-content is European-centered. Please see the ESP coordinator for further information.

   **Group D**
   
   ARTH*1510 [0.50] Art Historical Studies I
   ARTH*1520 [0.50] Art Historical Studies II
   ARTH*2550 [0.50] The Italian Renaissance
   ARTH*2580 [0.50] Late Modern Art: 1900-1950
   ARTH*2600 [0.50] Early Modern Art
   ARTH*3320 [0.50] Lives: Aspects of Western Art
   ARTH*3330 [0.50] Display: Visual Culture in Western Europe
   ARTH*3340 [0.50] Studies in Renaissance and Baroque Art
   MUSC*1060 [0.50] Amadeus to Zeppelin: Music and Culture I
   MUSC*2010 [0.50] The Musical Avant-Garde

Note: other music history courses may be counted if students with knowledge of music are granted waivers by instructor. The substitution(s) must also be approved by the ESP coordinator.

European Studies (EURS)

**Interdisciplinary Program**

The European Studies program is designed for students who seek a career in International Relations - especially in International Business and Administration - between Canada and Europe. It offers a combination of languages, specially designed courses in European thought, letters and history and specialization in either European Business or European Culture and Civilization.

Successful completion of the European Studies major requires proficiency in one of the following languages (French, German, Italian or Spanish). In order to demonstrate language proficiency, students have two options: they may study for a year at a European University, in the country where their chosen core language is spoken, or they may write a final research paper in the chosen core language within a required fourth year European Studies course (see EURO*4740). It is highly recommended that students spend their third year studying at a European university, in the country where their chosen core language is spoken. The benefits of such an experience are considerable, both academically and personally. One specific academic outcome of a successful year abroad will be recognition that the student has fulfilled the program’s core language requirement. For students who have spent one year studying at a European university in a country where their chosen core language is spoken, a course taken in that year involving a major academic paper or exam in the core language will, upon approval of the Co-ordinator of European Studies, be substituted for EURO*4740. See the Coordinator for the European Studies program for more information. See also the course description for EURO*4740.

**Major (Honours Program)**

A minimum of 12.00 credits is required, including:

5.00 credits in the three components of the European Studies core, 2.50 credits in one language, and 4.50 credits in either the European Culture and Civilization or the European Business Studies area of emphasis

**Core Requirements**

1. EURO*1100 [0.50] European Cinema
   EURO*2200 [0.50] Towards European Modernism
   EURO*3000 [0.50] Revolution and the Fantastic in European Culture
   EURO*4050 [0.50] Contemporary Europe. New Landscapes in the Post-Cold War Era
   EURO*4740 [0.50] Research Project in European Studies
   HIST*2510 [0.50] Modern Europe Since 1789
   HROB*2090 [0.50] Individuals and Groups in Organizations
   POLS*2200 [0.50] International Relations
   POLS*3450 [0.50] European Governments and Politics
   EURO*3300 [0.50] Violence and Culture
   EURO*4050 [0.50] Contemporary Europe. New Landscapes in the Post-Cold War Era
   EURO*4740 [0.50] Research Project in European Studies
   HIST*2510 [0.50] Modern Europe Since 1789
   HROB*2090 [0.50] Individuals and Groups in Organizations
   POLS*2200 [0.50] International Relations
   POLS*3450 [0.50] European Governments and Politics

* Note: Courses marked with an asterisk* may require the completion of additional prerequisites not included in the requirements for the Environmental Governance major. Students should consult the most recent Undergraduate Calendar (Chapter XII – Course Descriptions) for specific prerequisites.
### Areas of Emphasis

#### European Business

**Required courses:**
- **ACCT*1220 [0.50]** Introductory Financial Accounting
- **ACCT*2230 [0.50]** Management Accounting
- **ECON*1050 [0.50]** Introductory Microeconomics
- **ECON*1100 [0.50]** Introductory Macroeconomics
- **MGMT*3320 [0.50]** Financial Management
- **MGMT*4000 [0.50]** Strategic Management

1.50 credits chosen from:
- **ECON*2310 [0.50]** Intermediate Microeconomics
- **ECON*2410 [0.50]** Intermediate Macroeconomics
- **ECON*2560 [0.50]** Introduction to Finance
- **ECON*3660 [0.50]** Investments
- **ECON*3730 [0.50]** The Origins of International Inequality
- **FARE*3310 [0.50]** Operations Management
- **FARE*4370 [0.50]** Food & Agri-Marketing Management
- **HROB*2200 [0.50]** Labour Relations
- **HROB*2290 [0.50]** Human Resources Management
- **HTM*1070 [0.50]** Responsible Tourism Policy and Planning
- **HTM*3030 [0.50]** Beverage Management
- **HTM*3160 [0.50]** Destination Management and Marketing
- **HTM*4050 [0.50]** Wine and Oenology
- **HTM*4170 [0.50]** International Tourism
- **MCS*1000 [0.50]** Introductory Marketing
- **MCS*2100 [0.50]** Personal Financial Management
- **MCS*2600 [0.50]** Fundamentals of Consumer Behaviour
- **MCS*3000 [0.50]** Advanced Marketing
- **MCS*3040 [0.50]** Business and Consumer Law
- **STAT*2060 [0.50]** Statistics for Business Decisions

#### European Culture and Civilization

Students must take 4.50 credits including at least 0.50 credits from each of the following four groups. The remaining 2.50 credits may be chosen from any of the courses in the four groups.

**Group A**
- **HIST*1010 [0.50]** Early Modern Europe
- **HIST*2200 [0.50]** The Medieval World
- **HIST*2510 [0.50]** Modern Europe Since 1789
- **HIST*2820 [0.50]** Modern France Since 1750
- **HIST*3230 [0.50]** Spain and Portugal, 1085 to 1668
- **HIST*3350 [0.50]** Modern Germany
- **HIST*3570 [0.50]** Women in Modern Europe
- **HIST*3750 [0.50]** The Reformation
- **HIST*3820 [0.50]** Early Modern France
- **HIST*4090 [1.00]** Modern European History
- **HIST*4470 [0.50]** Special History Project Seminar I
- **HIST*4580 [1.00]** The French Revolution

**Group B**
- **PHIL*2140 [0.50]** Ancient Greek Philosophy
- **PHIL*2160 [0.50]** Early Modern Philosophy: Reason vs. Experience
- **PHIL*3060 [0.50]** Medieval Philosophy
- **PHIL*3100 [0.50]** Kant and His Legacy
- **PHIL*3200 [0.50]** Continental Philosophy
- **PHIL*3360 [0.50]** Nineteenth Century Philosophy
- **POLS*1400 [0.50]** Issues in Canadian Politics
- **POLS*1500 [0.50]** World Politics
- **POLS*2000 [0.50]** Political Theory
- **POLS*2100 [0.50]** Comparative Politics
- **POLS*3230 [0.50]** Modern Political Thought
- **POLS*3250 [0.50]** Public Policy: Challenges and Prospects
- **POLS*3370 [0.50]** Environmental Politics and Governance
- **POLS*3670 [0.50]** Comparative Public Policy and Administration
- **POLS*3790 [0.50]** International Political Economy
- **POLS*4340 [1.00]** Nationalism, State-building and Identity

**Group C**
- **CLAS*1000 [0.50]** Introduction to Classical Culture
- **CLAS*2000 [0.50]** Classical Mythology
- **CLAS*2350 [0.50]** The Classical Tradition
- **FREN*3030 [0.50]** Good and Evil
- **FREN*3110 [0.50]** Storytelling in the Francophone World
- **FREN*3140 [0.50]** Women in Literature, Art and Film
- **FREN*3160 [0.50]** Songs, Lyrics and Poetry in French
- **FREN*3170 [0.50]** Fictions of Childhood
- **HIST*2850 [0.50]** Ancient Greece and Rome
- **HUMN*1030 [0.50]** What Makes a Literary Classic?
- **HUMN*3000 [0.50]** Narratives of Migration
- **HUMN*3020 [0.50]** Myths and Fairy Tales in Germany
- **HUMN*3400 [0.50]** Renaissance Lovers and Fools
- **HUMN*3470 [0.50]** Holocaust & WWII in German Lit. & Film

**Other Spanish and Hispanic literature courses** may be counted in this section provided the course-content is European-centered. Please see the ESP coordinator for further information.

### Study Abroad

Year 3 or year 4 will provide students with the opportunity to continue their studies abroad. Students will select up to 6.00 credits which can be included in the area of emphasis, as electives, or both. They are subject to approval by the program coordinator. Courses taken in Europe will not count towards the specialization average.

### Practicum Opportunity:

EURO*3700 is available for those students wishing to participate in a practicum experience as part of the year abroad. The practicum must be a job or volunteer experience that contributes to the student's area of study and intended career. It must be approved in advance by the Coordinator. A final report, written in the student's chosen language, is a requirement of this course.

### Family and Child Studies (FCS)

Department of Family Relations and Applied Nutrition, College of Social and Applied Human Sciences
Family and Child Studies is offered as a minor in the honours program. It is designed to provide students with an opportunity to pursue interdisciplinary studies which have a specific focus on human development over the life span and on the applied questions which relate to the needs of children and the functioning of families. Elective courses may be chosen to emphasize the family, the child, or a combination of the two. Students seeking counselling should consult with a faculty advisor in the Department of Family Relations and Applied Nutrition.

**Minor (Honours Program)**

A minimum of 5.00 credits is required, including:

- FRHD*1010 [0.50] Human Development
- FRHD*1020 [0.50] Couple and Family Relationships
- FRHD*2270 [0.50] Development in Early and Middle Childhood
- FRHD*3040 [0.50] Parenting and Intergenerational Relationships
- NUTR*1010 [0.50] Introduction to Nutrition

A further 2.50 credits offered by the Department of Family Relations and Applied Nutrition (FRHD or NUTR*2050 or NUTR*3150 or NUTR*4070), of which at least 1.00 must be at the 3000 level or above.

**Note:** where students are required to complete PSYC*2450 for their program of study, FRHD*2270 will not be required in the FCS minor, PSYC*2450 will be substituted for FRHD*2270.

### Food, Agricultural and Resource Economics (FARE)

**Department of Food, Agricultural and Resource Economics, Ontario Agricultural College**

Food and Agriculture connect people with the world’s natural resource base and are at the heart of global issues. In this major, students will acquire the analytical and management skills needed to develop the capacity to effectively deal with emerging issues and challenges, such as food, security and sustainability. Building on the understanding of economic theory and applied methods in both the Canadian and world context, a variety of job opportunities arise in industry, government agencies and non-governmental organizations.

Beyond the core offering, the major provides the flexibility for students to pursue thematic areas of study, as well as an opportunity to take additional liberal arts courses. In addition, this major provides excellent background for those students planning to undertake graduate work in food, agricultural or resource economics and other fields of applied economics.

**Major (Honours Program)**

A minimum of 11.00 credits, consisting of the 9.50 credits specified below plus 1.50 credits of restricted electives, is required, including:

- ACCT*1220 [0.50] Introductory Financial Accounting
- AGR*1110 [1.00] Introduction to the Agri-Food Systems
- FARE*1300 [0.50] Poverty, Food & Hunger
- FARE*1400 [1.00] Economics of the Agri-Food System
- FARE*2410 [0.50] Agrifood Markets and Policy
- FARE*2700 [0.50] Survey of Natural Resource Economics
- FARE*3030 [0.50] The Firm and Markets
- FARE*4000 [0.50] Agricultural and Food Policy
- ECON*1050 [0.50] Introductory Microeconomics
- ECON*1100 [0.50] Introductory Macroeconomics
- ECON*2310 [0.50] Intermediate Microeconomics
- ECON*2410 [0.50] Intermediate Macroeconomics
- ECON*2740 [0.50] Economic Statistics
- ECON*2770 [0.50] Introductory Mathematical Economics
- ECON*3740 [0.50] Introduction to Econometrics

**One of:**

- FARE*3170 [0.50] Cost-Benefit Analysis
- FARE*4360 [0.50] Marketing Research
- FARE*4500 [0.50] Decision Science

**One of:**

- MATH*1030 [0.50] Business Mathematics
- MATH*1080 [0.50] Elements of Calculus I
- MATH*1200 [0.50] Calculus I

1.50 additional credits, at least of which 0.50 credits must be at the 4000 level, chosen from the following list of thematic streams with the Food, Agricultural and Resource Economics specializations.

### Food and Agribusiness Management:

- FARE*4220 [0.50] Advanced Agribusiness Management
- FARE*4240 [0.50] Futures and Options Markets
- FARE*4370 [0.50] Food & Agri Marketing Management
- MGMT*3320 [0.50] Financial Management

### International Agricultural Development Economics:

- ECON*2650 [0.50] Introductory Development Economics
- FARE*2520 [0.50] Food and International Development
- FARE*4210 [0.50] World Agriculture, Food Security and Economic Development

### Resource Economics:

- ECON*4930 [0.50] Environmental Economics

**Notes:** A student may obtain permission to substitute certain other courses for the ones listed if the substitute courses fit with the students program. Approval from a departmental advisor is required.

Unless taken to satisfy the requirements of another program, no student may receive credit in this program for more than one of the following statistics prerequisites ECON*2740, STAT*2040, STAT*2060, or STAT*2080.

### French Studies (FREN)

**School of Languages and Literatures, College of Arts**

All language courses carry 0.50 credits. Please note that students with Ontario Grade 12 credit or its equivalent in French are not normally admitted into FREN*1090, FREN*1100 or FREN*1150. Francophone students usually start the program with second-year courses conditional upon approval by the Faculty Advisor. Students who are exempt from FREN*1200 and/or FREN*1300 will need to substitute higher level French course(s) in order to complete the required number of credits for their program. Under certain circumstances, 0.50 credits from other courses offered in the School of Languages and Literatures which contain material related to French Studies may be counted. Please see the faculty advisor for French Studies for more information. Students majoring in French are advised to take elective courses in another Romance language and in Latin.

It is also recommended that students include LING*1000 among the electives in order to derive the maximum benefit from their studies. Except where stated otherwise, literary texts are, at all levels, studied in the original language. Students registering in French courses are expected to have the appropriate academic background.

**Area of Concentration (General Program)**

A minimum of 5.00 French credits taught in French is required, including:

- FREN*1200 [0.50] French Language I
- FREN*1300 [0.50] French Language II
- FREN*2060 [0.50] Quebec: Literature and Society
- FREN*2520 [0.50] French Composition I

2.50 additional credits in French

**Major (Honours Program)**

A minimum of 8.00 French credits taught in French is required, including:

- FREN*1200 [0.50] French Language I
- FREN*1300 [0.50] French Language II
- FREN*2060 [0.50] Quebec: Literature and Society
- FREN*2520 [0.50] French Composition I

at least 1.50 credits at the 4000 level

4.00 additional credits in French

**Minor (Honours Program)**

A minimum of 5.00 French credits taught in French is required, including:

- FREN*1200 [0.50] French Language I
- FREN*1300 [0.50] French Language II
- FREN*2060 [0.50] Quebec: Literature and Society
- FREN*2520 [0.50] French Composition I

2.50 additional credits in French

**Notes:**

1. Students are strongly urged to take at least 0.50 language credits each semester and they must plan to take a 4th year course in their 3rd year.

2. Students of French are encouraged to take advantage of the French residence on this campus. Applications for accommodation in the Maison Française should be made well in advance of registration.

3. FREN*1090, FREN*1100, FREN*1150, are not counted toward a specialization in French.

4. Native speakers of French (or non-francophone equivalent) will not normally be admitted into FREN*1200 and FREN*1300. It is recommended they start their program with FREN*2020, FREN*2060, FREN*2520, or FREN*2520 with the approval of the Faculty Advisor.

### Studies in Quebec or Abroad

The French program encourages students to spend 1 or 2 semesters in a French-speaking province or country, or to pursue their studies in an immersion program at the university level. A letter of permission is required (see Section VIII—Undergraduate Degree Regulations & Procedures). Students may also take advantage of federal-provincial programs such as the Explore program or the Ontario Rhone-Alps summer language course.
Year in Nice
A special year-long program in Nice, France, is offered to Guelph students at semester levels 5 and 6. All courses for which transfer credits have been arranged are credited at Guelph without the need for letters of permission; students pay only Guelph academic fees and are eligible for OSAP. For further information see the Head of French Studies.

Geography (GEOG)
Department of Geography, Environment and Geomatics, College of Social and Applied Human Sciences
The Department of Geography, Environment and Geomatics provides students with a broad range of courses in Human and Physical Geography which focus on the nature and evolution of the numerous and complex physical and human environment systems of the world. Students are required to select courses from both the human and physical fields. Within the program of studies it is possible for students through course selection to follow a particular line of interest in, for example, Rural Geography, Resource Management, Urban and Economic Geography, Biophysical Resources or Geomorphology. The 1000 level courses provide a foundation for the Geography programs and are prerequisites or are strongly recommended for many of the 2000 level courses. The 2000 level systematic courses are prerequisite to the corresponding advanced courses at the 3000 and 4000 level. All students should obtain a copy of the department program planning guide and consult with faculty before planning their course of studies.

Students contemplating graduate or professional programs of study following completion of the honors program should consult a faculty advisor for advice on additional courses that they should take.

The department also offers a B.SC. honours Earth Surface Science program (jointly with Land Resources Science), a B.SC.(ENV.) honours Environmental Geography Major program, and a B.SC. honours program in Geographic Information Systems and Environmental Analysis which are described in the schedule of studies for each of the programs (Section X). Geography B.A. honour’s Majors are eligible to take the B.SC. Minor. All Geography students are encouraged to consult with a faculty advisor regarding course selection.

The following courses may be counted as Geography credits: ENVS*2030, ENVS*2060, ENVS*4220, GEOL*2150, MET*2030, SOIL*2010.

Area of Concentration (General Program)
A minimum of 5.00 credits in Geography is required, including:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*1200</td>
<td>Society and Space</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*1220</td>
<td>Human Impact on the Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*1300</td>
<td>Introduction to the Biophysical Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2000</td>
<td>Geomorphology</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2110</td>
<td>Climate and the Biophysical Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2211</td>
<td>Environment and Resources</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2230</td>
<td>Commodity Chains and Cultures of Consumption</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2260</td>
<td>Applied Human Geography</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2460</td>
<td>Analysis in Geography</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2480</td>
<td>Mapping and GIS</td>
<td>0.50</td>
</tr>
</tbody>
</table>

2.00 credits at the 3000 level or above

Major (Honours Program)
A minimum of 9.00 credits in Geography is required, including:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*1200</td>
<td>Society and Space</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*1220</td>
<td>Human Impact on the Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*1300</td>
<td>Introduction to the Biophysical Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2000</td>
<td>Geomorphology</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2110</td>
<td>Climate and the Biophysical Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2211</td>
<td>Environment and Resources</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2230</td>
<td>Commodity Chains and Cultures of Consumption</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2260</td>
<td>Applied Human Geography</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2460</td>
<td>Analysis in Geography</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2480</td>
<td>Mapping and GIS</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*3480</td>
<td>GIS and Spatial Analysis</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*4880</td>
<td>Contemporary Geographic Thought</td>
<td>0.50</td>
</tr>
</tbody>
</table>

2.50 credits at the 3000 level or above including at least 1.50 credits at the 4000 level.

Minor (Honours Program)
A minimum of 5.00 credits in Geography is required, including:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*1200</td>
<td>Society and Space</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*1220</td>
<td>Human Impact on the Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*1300</td>
<td>Introduction to the Biophysical Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2000</td>
<td>Geomorphology</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2110</td>
<td>Climate and the Biophysical Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2211</td>
<td>Environment and Resources</td>
<td>0.50</td>
</tr>
</tbody>
</table>

2.00 credits at the 3000 level or above including at least 1.50 credits at the 4000 level.

Core Requirements
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST*1050</td>
<td>Invitation to History</td>
<td>0.50</td>
</tr>
<tr>
<td>HIST*2450</td>
<td>The Practising Historian</td>
<td>0.50</td>
</tr>
</tbody>
</table>

School of Languages and Literatures, College of Arts
All language courses carry 0.50 credits. Students with two years of high school German or equivalent may not be admitted into GERM*1110. Students with 12U German credit or its equivalent may be admitted into GERM*1110 only with the approval of the department. All language students are advised to include LING*1000 among their electives in order to derive the maximum benefit from their studies. Except where stated otherwise, literary texts are, at all levels, studied in the original language. Students registering in these courses will be expected to have the appropriate knowledge.

Study Abroad
The School of Languages and Literatures encourages students in the German program to spend 1 or 2 semesters in a German speaking country to continue their studies at the University level. Credit for programs of study successfully completed may be applied towards the University of Guelph degree requirements. For more information, contact the Centre for International Programs or the School of Languages and Literatures.

Minor (Honours Program)
A minimum of 5.00 credits in German is required from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM*1100</td>
<td>Introductory German I</td>
<td>0.50</td>
</tr>
<tr>
<td>GERM*1110</td>
<td>Introductory German II</td>
<td>0.50</td>
</tr>
<tr>
<td>GERM*2010</td>
<td>Intermediate Language Practice</td>
<td>0.50</td>
</tr>
<tr>
<td>GERM*2490</td>
<td>Intermediate German</td>
<td>0.50</td>
</tr>
<tr>
<td>GERM*3000</td>
<td>Narratives of Migration</td>
<td>0.50</td>
</tr>
<tr>
<td>GERM*3020</td>
<td>Myth and Fairy Tales in Germany</td>
<td>0.50</td>
</tr>
<tr>
<td>GERM*3150</td>
<td>Interactive German Language and Culture</td>
<td>0.50</td>
</tr>
<tr>
<td>GERM*3470</td>
<td>Holocaust &amp; WWII in German Lit. &amp; Film</td>
<td>0.50</td>
</tr>
<tr>
<td>GERM*3600</td>
<td>Directed Readings in German Studies</td>
<td>0.50</td>
</tr>
<tr>
<td>GERM*3700</td>
<td>Experiential Learning and Language</td>
<td>0.50</td>
</tr>
<tr>
<td>GERM*4940</td>
<td>Research Paper in German Studies</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Upon passing both the German designation and its Humanities co-requirements, students may count HUMN*3000, HUMN*3020 and HUMN*3470 toward the German minor. Students may also count 0.50 credit toward the German minor from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH*2950</td>
<td>Baroque Art</td>
<td>0.50</td>
</tr>
<tr>
<td>HIST*3350</td>
<td>Modern Germany</td>
<td>0.50</td>
</tr>
<tr>
<td>HUMN*1030</td>
<td>What Makes a Literary Classic?</td>
<td>0.50</td>
</tr>
<tr>
<td>LING*1000</td>
<td>Introduction to Linguistics</td>
<td>0.50</td>
</tr>
<tr>
<td>PHIL*3100</td>
<td>Kant and His Legacy</td>
<td>0.50</td>
</tr>
<tr>
<td>PHIL*3360</td>
<td>Nineteenth Century Philosophy</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Students enrolled in the German program must contact the School of Languages and Literatures for an up-to-date sequence of course offerings.

History (HIST)
Department of History, College of Arts
Courses marked (H) are designed as honours courses. Students in a general program wishing to take these must obtain the permission of instructors concerned. All other courses may be taken by both general and honours students. Students wishing to take a 3000 level course must have pass standing in at least 5.00 credits in university courses.

Students wishing to take a 4000 level course must have pass standing in at least 10.00 university credits. Access to all 4000 level history courses is restricted to students in the B.A. Honours program with at least a 70% average in all history course attempts. Students should note the prerequisite requirements of upper level courses in planning their individual programs.

Students entering semester 1 are advised to choose from 1000 level courses. Second semester students wishing to take an advanced level History course should select that course from the History core.

Core Requirements
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST*1010</td>
<td>Early Modern Europe</td>
<td>0.50</td>
</tr>
<tr>
<td>HIST*1150</td>
<td>The Modern World</td>
<td>0.50</td>
</tr>
<tr>
<td>HIST*1250</td>
<td>Science and Technology in a Global Context</td>
<td>0.50</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST*2100</td>
<td>Pre-Confederation Canada</td>
<td>0.50</td>
</tr>
<tr>
<td>HIST*2600</td>
<td>Post-Confederation Canada</td>
<td>0.50</td>
</tr>
</tbody>
</table>

While not required to do so, students are advised to take both HIST*2100 and HIST*2600.
0.50 credits from each of a) Pre-Modern and b) Global. Course lists available in the Department of History and at http://www.uoguelph.ca/history/

Area of Concentration (General Program)
A minimum of 5.00 credits in History is required, including:

- HIST*1050 [0.50] Invitation to History
- HIST*2450 [0.50] The Practising Historian

b. One of:
- HIST*1010 [0.50] Early Modern Europe
- HIST*1150 [0.50] The Modern World
- HIST*1250 [0.50] Science and Technology in a Global Context

c. at least 1.50 credits in History must be at the 3000 level (excluding HIST*3470)

2.00 additional credits in History

Note: With the permission of the department, students may select as part of their program 0.50 credits outside the History Department such as ECON*2420, ECON*3730, EURO*4050.

Major (Honours Program)
A minimum of 8.50 credits in History courses is required, including:

- HIST*1050 [0.50] Invitation to History
- HIST*2450 [0.50] The Practising Historian

One of:

- HIST*1010 [0.50] Early Modern Europe
- HIST*1150 [0.50] The Modern World
- HIST*1250 [0.50] Science and Technology in a Global Context

One of:

- HIST*2100 [0.50] Pre-Confederation Canada
- HIST*2600 [0.50] Post-Confederation Canada

While not required to do so, students are advised to take both HIST*2100 and HIST*2600.

0.50 credits from each of a) Pre-Modern and b) Global. Course lists available in the Department of History and at http://www.uoguelph.ca/history/

5.50 additional credits in History including 2.00 at the 4000 level

Minor (Honours Program)
A minimum of 5.00 credits in History is required, including:

- HIST*1050 [0.50] Invitation to History
- HIST*2450 [0.50] The Practising Historian

One of:

- HIST*1010 [0.50] Early Modern Europe
- HIST*1150 [0.50] The Modern World
- HIST*1250 [0.50] Science and Technology in a Global Context

One of:

- HIST*2100 [0.50] Pre-Confederation Canada
- HIST*2600 [0.50] Post-Confederation Canada

While not required to do so, students are advised to take both HIST*2100 and HIST*2600.

0.50 credits from each of a) Pre-Modern and b) Global. Course lists available in the Department of History and at http://www.uoguelph.ca/history/

2.00 additional credits in History including 1.00 at the 3000 or 4000 level

Note: Honours students in History may, with the permission of the department, take up to 1.00 credits from outside the department such as ECON*2420, ECON*3730, EURO*4050.

Students considering graduate work are advised to take 2.00 - 3.00 additional upper level History credits perhaps including the Special History Project Seminar (HIST*4470, HIST*4970) and to acquire a reading knowledge of a foreign language.

Honours students must complete HIST*2450 by the end of their third semester to be eligible for 3000 level History courses.

Human Resources (HR)
Department of Management, Gordon S. Lang School of Business and Economics

The Minor in Human Resources focuses on developing the broad set of knowledge and skills expected of human resources professionals. The courses are unique, varied and relevant to student who are interested in pursuing careers in business, management, psychology, industrial relations, law or other related fields.

In addition to the general overview, students develop the following nine competency areas:

- Human Resource Management
- Organizational Behaviour
- Finance and Accounting
- Human Resources Planning
- Occupational Health and Safety
- Training and Development
- Labour Relations
- Recruitment and Selection

- Compensation

The courses in the Minor in HR satisfy the course requirements for the Certified Human Resources Leader (“CHRL”) designation.

Minor (Honours Program)
A minimum of 5.00 credits is required, including:

- ACCT*1220 [0.50] Introductory Financial Accounting
- ACCT*2230 [0.50] Management Accounting
- HROB*2090 [0.50] Individuals and Groups in Organizations
- HROB*2200 [0.50] Labour Relations
- HROB*2290 [0.50] Human Resources Management
- HROB*3010 [0.50] Compensation Systems
- HROB*3030 [0.50] Occupational Health and Safety
- HROB*3070 [0.50] Recruitment and Selection
- HROB*3090 [0.50] Training and Development
- HROB*4060 [0.50] Human Resource Planning

Individual Studies (IS)

Interdisciplinary Program
B.A. Counselling Office, Room 130, MacKinnon Building, Ext. 52140.

Honours B.A. students have the option of doing an Individual Studies Major. Students in the Individual Studies Major have the opportunity to determine the goals and methods of their studies. Areas of study can include courses in any of the colleges and where the University of Guelph has faculty expertise to assist students. Students are encouraged to develop an interdisciplinary perspective, and to explore the methods of inquiry which provide depth of knowledge in a specific subject.

A student submitting a proposal for the Individual Studies Major must submit the complete proposal to the B.A. Program Counsellor before the third week of classes of semester four. The B.A. Program Committee will consider proposals once, and will approve, approve with revisions, or deny the proposal. Proposals cannot be resubmitted.

Proposals will not be considered unless they articulate a detailed rationale for a coherent program of studies that is significantly different from any existing major and minor combination at the University of Guelph, and unless the proposal meets the following criteria:

a. minimum of 9.00 credits
b. minimum of 4.00 credits at the 3000 level and above, including at least 1.00 credits at the 4000 level
c. minimum of 1.00 credits in methods and/or theory
d. maximum of 1.50 credits at the 1000 level
e. a senior level Directed Readings or Special Project course must be completed. When appropriate, the Committee will identify a faculty member as the supervisor for a student's course of study.

A student wishing to submit a proposed program of studies for the Individual Studies Major must prepare a proposal that will include the following:

a. a clear statement of theme or areas of study
b. a clear statement of the contribution of the major to a post-graduation field of work or study
c. a clearly set out rationale for inclusion of the specific courses and how they relate to or develop the theme or areas of study
d. a list of required "core" courses and "restricted electives" following the above criteria. When proposing core and restricted elective credits, students should keep in mind the prerequisites for their desired 3000 and 4000 level courses

Note: Students undertaking the Individual Studies Major must fulfill the requirements of the B.A. Honours Program as set out in Section X. The B.A. Program Counsellor is the academic counsellor. The Individual Studies designation will appear on the student's transcript upon graduation, but the title or subject of the major will not.

International Development Studies (IDS)

Interdisciplinary Program
International Development Studies, College of Social and Applied Human Sciences

The program in International Development Studies (IDS) explores the nature and impacts of economic and social development, in Canada and across the globe, from an interdisciplinary perspective. It equips students with the theoretical understanding and analytical and practical skills needed to bring about positive and inclusive change in the world. Students completing a degree in IDS have the skills to tackle complex global problems as needed to promote social justice as citizens and in careers across the public and private sectors and in civil society organizations.

The IDS program provides students with the opportunity to engage with international development practitioners in Canada and internationally. Furthermore, they are equipped with the skills needed for effective engagement whilst as students and in their life beyond university.

Students select an area of emphasis that enables them to explore an issue of particular interest using the skills they develop in the core part of the program. This area of emphasis is selected by the end of the 4th academic semester of study.
International Development Studies students are encouraged to learn another language and to participate in relevant learning experiences beyond the IDS program, including study, work or volunteering in Canada and internationally. In addition to the required core courses and the chosen area of emphasis, students are encouraged to take electives that complement their degree and enhance their analytical and communication skills. See the GIDS website for more information on these opportunities and students can get more information from their academic advisor.

Students with a minimum cumulative average of 80% in courses that constitute the IDS major may complete a thesis (IDEV*4190 and IDEV*4150) under the supervision of an ID-affiliated faculty member.

**Major (Honours Program)**

A minimum of 10.50 credits is required, including:

- 8.00 core course requirements
- 2.50 credits in one of four areas of emphasis

**Core Requirements - 8.00 credits**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*1050</td>
<td>Introductory Microeconomics</td>
<td>0.50</td>
</tr>
<tr>
<td>ECON*1100</td>
<td>Introductory Macroeconomics</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*1000</td>
<td>Understanding Development and Global Inequalities</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*2000</td>
<td>The Development Landscape: Actors and Institutions</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*2100</td>
<td>Research in International Development</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*2300</td>
<td>Theoretical Perspectives on Development</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*2400</td>
<td>Development, Social Justice and Human Rights</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*3000</td>
<td>Poverty and Inequality</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*3100</td>
<td>Achieving Sustainable Development</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*3300</td>
<td>Engaging in Development Practice</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*3400</td>
<td>Managing and Evaluating Change in Development</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*4000</td>
<td>Development in Action</td>
<td>1.00</td>
</tr>
<tr>
<td>IDEV*4600</td>
<td>Advocating and Effecting Change in Development Policy and Practice</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Areas of Emphasis - 2.50 credits**

Choose one of the following four Area of Emphasis:

- Agriculture and Food Security
- Development in the Canadian Context
- Development in Fragile Contexts
- Environment and Sustainable Development

**Agriculture and Food Security**

This area of emphasis focuses on the nature of food security from the local to global levels. It explores the role of agriculture and the wider agri-food system in promoting food security towards the eradication of hunger and improved nutrition and health. Throughout, this area of emphasis reflects critically on the role of diverse actors and alternative approaches through which food security can be enhanced, empowering students to bring about positive, inclusive and sustainable change in agri-food systems locally and globally.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR*2150</td>
<td>Plant Agriculture for International Development</td>
<td>0.50</td>
</tr>
<tr>
<td>FARE*1300</td>
<td>Poverty, Food &amp; Hunger</td>
<td>0.50</td>
</tr>
</tbody>
</table>

1.50 credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR*2500</td>
<td>Field Course in International Agriculture</td>
<td>0.50</td>
</tr>
<tr>
<td>ANTH*4550</td>
<td>Topics in the Anthropology of Health</td>
<td>0.50</td>
</tr>
<tr>
<td>ENV*2130</td>
<td>Eating Sustainably in Ontario</td>
<td>0.50</td>
</tr>
<tr>
<td>FARE*3250</td>
<td>Food and International Development</td>
<td>0.50</td>
</tr>
<tr>
<td>FARE*4210</td>
<td>World Agriculture, Food Security and Economic Development</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*3320</td>
<td>Food Systems: Issues in Security and Sustainability</td>
<td>0.50</td>
</tr>
<tr>
<td>HIST*3240</td>
<td>Food History</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*4100</td>
<td>Thesis in International Development Studies I</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*4150</td>
<td>Thesis in International Development Studies II</td>
<td>0.50</td>
</tr>
<tr>
<td>SOC*4420</td>
<td>Sociology of Food</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Development in the Canadian Context**

This area focuses on development predominantly through the case of Canada. Issues that might be explored include: poverty, global migration, inequality, Indigenous-settler relations and food insecurity. It reflects the fact that development problems are found in all parts of the world and solutions to them must recognize the ways in which they are interconnected and distinctive. This area of emphasis aims to empower students to bring about positive, inclusive and sustainable change within Canada, and the rest of the affluent world.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH*2660</td>
<td>Contemporary Indigenous Peoples in Canada</td>
<td>0.50</td>
</tr>
<tr>
<td>POLS*2300</td>
<td>Canadian Government and Politics</td>
<td>0.50</td>
</tr>
</tbody>
</table>

1.50 credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*1050</td>
<td>Introductory Microeconomics</td>
<td>0.50</td>
</tr>
<tr>
<td>ECON*1100</td>
<td>Introductory Macroeconomics</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*1000</td>
<td>Understanding Development and Global Inequalities</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*2000</td>
<td>The Development Landscape: Actors and Institutions</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*2100</td>
<td>Research in International Development</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*2300</td>
<td>Theoretical Perspectives on Development</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*2400</td>
<td>Development, Social Justice and Human Rights</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*3000</td>
<td>Poverty and Inequality</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*3100</td>
<td>Achieving Sustainable Development</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*3300</td>
<td>Engaging in Development Practice</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*3400</td>
<td>Managing and Evaluating Change in Development</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*4000</td>
<td>Development in Action</td>
<td>1.00</td>
</tr>
<tr>
<td>IDEV*4600</td>
<td>Advocating and Effecting Change in Development Policy and Practice</td>
<td>0.50</td>
</tr>
<tr>
<td>POLS*3490</td>
<td>Conflict and Conflict Resolution</td>
<td>0.50</td>
</tr>
<tr>
<td>POLS*2200</td>
<td>Comparative Politics</td>
<td>0.50</td>
</tr>
</tbody>
</table>

1.50 credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH*4440</td>
<td>Culture, Rights and Development</td>
<td>0.50</td>
</tr>
<tr>
<td>HIST*3270</td>
<td>Revolution in the Modern World</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*4100</td>
<td>Thesis in International Development Studies I</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*4150</td>
<td>Thesis in International Development Studies II</td>
<td>0.50</td>
</tr>
<tr>
<td>POLS*3000</td>
<td>Politics of Africa</td>
<td>0.50</td>
</tr>
<tr>
<td>POLS*3060</td>
<td>Politics of the Middle East and North Africa</td>
<td>0.50</td>
</tr>
<tr>
<td>POLS*3080</td>
<td>Politics of Latin America</td>
<td>0.50</td>
</tr>
<tr>
<td>POLS*4340</td>
<td>Nationalism, State-building and Identity</td>
<td>1.00</td>
</tr>
<tr>
<td>SOAN*3130</td>
<td>Protest, Resistance, and Collective Action</td>
<td>0.50</td>
</tr>
<tr>
<td>SOAN*4260</td>
<td>Migration, Inequality and Social Change</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Environment and Sustainable Development**

This area of emphasis focuses on the relations between environmental change and natural resources and sustainable development. It explores the ways in which the environment and natural resources impact development, and the development challenges posed by environmental change and natural resource use locally and globally. Topics might include urbanization, erosion, natural disasters, water, natural resource, land use and climate change. Particular focus is put on approaches to development that are sustainable and address challenges associated with environmental change and natural resource use. This area of emphasis aims to empower students to bring about positive change that promotes inclusive and sustainable development locally and globally.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*2030</td>
<td>Environment and Development</td>
<td>0.50</td>
</tr>
<tr>
<td>SOC*2280</td>
<td>Society and Environment</td>
<td>0.50</td>
</tr>
</tbody>
</table>

1.50 credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*2110</td>
<td>Economic Growth and Environmental Quality</td>
<td>0.50</td>
</tr>
<tr>
<td>ENV*2120</td>
<td>Introduction to Environmental Stewardship</td>
<td>0.50</td>
</tr>
<tr>
<td>FARE*2700</td>
<td>Survey of Natural Resource Economics</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*3020</td>
<td>Global Environmental Change</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*3090</td>
<td>Gender and Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>HIST*3460</td>
<td>Natural Disasters in Global History</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*4100</td>
<td>Thesis in International Development Studies I</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*4150</td>
<td>Thesis in International Development Studies II</td>
<td>0.50</td>
</tr>
<tr>
<td>POLS*3370</td>
<td>Environmental Politics and Governance</td>
<td>0.50</td>
</tr>
<tr>
<td>SOAN*4250</td>
<td>Energy and Society</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Area of Concentration (General Program)**

A minimum of 5.00 credits is required, including:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*1050</td>
<td>Introductory Microeconomics</td>
<td>0.50</td>
</tr>
<tr>
<td>ECON*1100</td>
<td>Introductory Macroeconomics</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*1000</td>
<td>Understanding Development and Global Inequalities</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*2000</td>
<td>The Development Landscape: Actors and Institutions</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*2300</td>
<td>Theoretical Perspectives on Development</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Two of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDEV*2400</td>
<td>Development, Social Justice and Human Rights</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*3000</td>
<td>Poverty and Inequality</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*3100</td>
<td>Achieving Sustainable Development</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*3400</td>
<td>Managing and Evaluating Change in Development</td>
<td>0.50</td>
</tr>
<tr>
<td>IDEV*4600</td>
<td>Advocating and Effecting Change in Development Policy and Practice</td>
<td>0.50</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*2650</td>
<td>Introductory Development Economics</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*3050</td>
<td>Development and the City</td>
<td>0.50</td>
</tr>
<tr>
<td>POLS*3320</td>
<td>Politics of Aid &amp; Development</td>
<td>0.50</td>
</tr>
<tr>
<td>POLS*3790</td>
<td>International Political Economy</td>
<td>0.50</td>
</tr>
<tr>
<td>SOAN*3680</td>
<td>Perspectives on Development</td>
<td>0.50</td>
</tr>
</tbody>
</table>
A minimum of 1.00 credits taken from any of the four areas of emphasis of the Major, at least 0.50 being at the 3000 or 4000 levels.

**Minor (Honours Program)**

A minimum of 5.00 credits is required, including:
- ECON*1050 [0.50] Introductory Microeconomics
- ECON*1100 [0.50] Introductory Macroeconomics
- IDEV*1000 [0.50] Understanding Development and Global Inequalities
- IDEV*2000 [0.50] The Development Landscape: Actors and Institutions
- IDEV*2300 [0.50] Theoretical Perspectives on Development

Two of:
- IDEV*2400 [0.50] Development, Social Justice and Human Rights
- IDEV*3000 [0.50] Poverty and Inequality
- IDEV*3100 [0.50] Achieving Sustainable Development
- IDEV*3400 [0.50] Managing and Evaluating Change in Development
- IDEV*4600 [0.50] Advocating and Effecting Change in Development Policy and Practice

One of:
- ECON*2650 [0.50] Introductory Development Economics
- GEOG*3050 [0.50] Development and the City
- POLS*3320 [0.50] Politics of Aid & Development
- POLS*3790 [0.50] International Political Economy
- SOAN*3680 [0.50] Perspectives on Development

A minimum of 1.00 credits taken from any of the four areas of emphasis of the Major, at least 0.50 being at the 3000 or 4000 levels.

**International Development Studies (Co-op) (IDS:C)**

**Interdisciplinary Program**

**International Development Studies, College of Social and Applied Human Sciences**

The program in International Development Studies (IDS) explores the nature and impacts of economic and social development, in Canada and across the globe, from an interdisciplinary perspective. It equips students with the theoretical understanding and analytical and practical skills needed to bring about positive and inclusive change in the world. Students completing a degree in IDS have the skills to tackle complex global problems as needed to promote social justice as citizens and in careers across the public and private sectors and in civil society organizations.

The IDS program provides students with the opportunity to engage with international development practitioners in Canada and internationally. Furthermore, they are equipped with the skills needed for effective engagement whilst as students and in their life beyond university.

Students select an area of emphasis that enables them to explore an issue of particular interest using the skills they develop in the core part of the program. This area of emphasis is selected by the end of the 4th academic semester of study.

International Development Studies students are encouraged to learn another language and to participate in relevant learning experiences beyond the IDS program, including study, work or volunteering in Canada and internationally. In addition to the required core courses and the chosen area of emphasis, students are encouraged to take electives that complement their degree and enhance their analytical and communication skills. See the GIDS website for more information on these opportunities or talk to your academic advisor.

Students with a minimum cumulative average of 80% in courses that constitute the IDS major may complete a thesis (IDEV*4190 and IDEV*4150) under the supervision of an IDES faculty advisor, listed on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

**Program Requirements**

The Co-op program in International Development is a four and a half year program, including four work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

International Development Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>Academic Semester 4</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>Academic Semester 6</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 7</td>
<td>COOP*3000 Work Term III</td>
<td>COOP*4000 Work Term IV</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education website.

**Credit Summary (21.50 Total Credits)**

- 8.00 - Required Core Courses
- 2.50 - Credits in one of four areas of emphasis
- 9.50 - Electives
- 1.50 - Co-op Work Terms

**Note:** A minimum of three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fourth Co-op work term is optional and if completed, the total number of credits will equal 22.00.

The recommended program sequence is outlined below.

**Major (Honours Program)**

A minimum of 10.50 credits is required, including:
- 8.00 core course requirements
- 2.50 credits in one of four areas of emphasis

**Agriculture and Food (Area of Emphasis)**

**Semester 1 - Fall**
- ECON*1050 [0.50] Introductory Microeconomics
- IDEV*1000 [0.50] Understanding Development and Global Inequalities
- 1.50 electives or restricted electives

**Semester 2 - Winter**
- ECON*1100 [0.50] Introductory Macroeconomics
- IDEV*2000 [0.50] The Development Landscape: Actors and Institutions
- IDEV*2100 [0.50] Research in International Development
- 1.00 electives or restricted electives

**Semester 3 - Fall**
- IDEV*2300 [0.50] Theoretical Perspectives on Development
- IDEV*2400 [0.50] Development, Social Justice and Human Rights
- 1.50 electives or restricted electives

**Semester 4 - Summer**
- IDEV*2300 [0.50] Theoretical Perspectives on Development
- IDEV*2400 [0.50] Development, Social Justice and Human Rights
- 1.50 electives or restricted electives

**Summer Semester**
- No academic semester or work term.

**Semester 5 - Winter**
- IDEV*3100 [0.50] Achieving Sustainable Development
- 2.00 electives or restricted electives

**Semester 6 - Summer**
- IDEV*3300 [0.50] Engaging in Development Practice
- IDEV*3400 [0.50] Managing and Evaluating Change in Development
- 1.50 electives or restricted electives

**Semester 7 - Fall**
- IDEV*3000 [0.50] Poverty and Inequality
- 2.00 electives or restricted electives

**Winter Semester**
- COOP*3000 [0.50] Co-op Work Term III

**Summer Semester**
- COOP*4000 [0.50] Co-op Work Term IV

**Semester 8 - Fall**
- IDEV*4000 [1.00] Development in Action
- IDEV*4600 [0.50] Advocating and Effecting Change in Development Policy and Practice
- 1.00 electives or restricted electives

**Restricted Electives**

A minimum of 4.00 credits is required from the following:
- ECON*2650 [0.50] Development Economics
- GEOG*3050 [0.50] Development and the City
- POLS*3320 [0.50] Politics of Aid & Development
- POLS*3790 [0.50] International Political Economy
- SOAN*3680 [0.50] Perspectives on Development

A minimum of 1.00 credits taken from any of the four areas of emphasis of the Major, at least 0.50 being at the 3000 or 4000 levels.

**Last Revision:** July 4, 2019
## Development in the Canadian Context (Area of Emphasis)

### Semester 1 - Fall
- ECON*1050 [0.50] Introductory Microeconomics
- IDEV*1100 [0.50] Understanding Development and Global Inequalities
1.50 electives or restricted electives

### Semester 2 - Winter
- ECON*1100 [0.50] Introductory Macroeconomics
2.00 electives or restricted electives

### Summer Semester
No academic semester or work term.

### Semester 3 - Fall
- COOP*1100 [0.00] Introduction to Co-operative Education
- IDEV*2000 [0.50] The Development Landscape: Actors and Institutions
- IDEV*2100 [0.50] Research in International Development
1.50 electives or restricted electives

### Semester 4 - Summer
- IDEV*2300 [0.50] Theoretical Perspectives on Development
- IDEV*2400 [0.50] Development, Social Justice and Human Rights
1.50 electives or restricted electives

### Semester 5 - Winter
- IDEV*3100 [0.50] Achieving Sustainable Development
2.00 electives or restricted electives

### Semester 6 - Summer
- IDEV*3300 [0.50] Engaging in Development Practice
- IDEV*3400 [0.50] Managing and Evaluating Change in Development
1.50 electives or restricted electives

### Semester 7 - Fall
- IDEV*3000 [0.50] Poverty and Inequality
- IDEV*4600 [0.50] Advocating and Effecting Change in Development Policy and Practice
1.50 electives or restricted electives

### Restrictive Electives
- ECON*2650 [0.50] Introductory Development Economics
- GEOG*3050 [0.50] Development and the City
- POLS*3320 [0.50] Politics of Aid and Development
- POLS*3790 [0.50] International Political Economy
- SOAN*3680 [0.50] Perspectives on Development
- ANTH*4440 [0.50] Culture, Rights and Development
- HIST*3270 [0.50] Revolution in the Modern World
- IDEV*4100 [0.50] Thesis in International Development Studies I
- IDEV*4150 [0.50] Thesis in International Development Studies II
- POLS*3900 [0.50] International Community
- SOAN*3130 [0.50] Protest, Resistance, and Collective Action
- SOAN*4260 [0.50] Migration, Inequality and Social Change
- ECON*1050 [0.50] Introductory Microeconomics
- IDEV*1100 [0.50] Understanding Development and Global Inequalities
- GEOG*2340 [0.50] World Agriculture, Food Security and Economic Development
- GEOG*3320 [0.50] Food Systems: Issues in Security and Sustainability
- HIST*3240 [0.50] Food History
- IDEV*4100 [0.50] Thesis in International Development Studies I
- IDEV*4150 [0.50] Thesis in International Development Studies II
- SOAN*4420 [0.50] Sociology of Food
- COOP*1100 [0.00] Introduction to Co-operative Education
- GEOG*2340 [0.50] Environment and Development

### Environment and Sustainable Development (Area of Emphasis)

### Semester 1 - Fall
- ECON*1050 [0.50] Introductory Microeconomics
- IDEV*1100 [0.50] Understanding Development and Global Inequalities
1.50 electives or restricted electives

### Semester 2 - Winter
- ECON*1100 [0.50] Introductory Macroeconomics
2.00 electives or restricted electives

### Summer Semester
No academic semester or work term.

### Semester 3 - Fall
- COOP*1100 [0.00] Introduction to Co-operative Education
- GEOG*2340 [0.50] Environment and Development

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
IDEV*2000 [0.50] The Development Landscape: Actors and Institutions
IDEV*2100 [0.50] Research in International Development
SOC*2280 [0.50] Society and Environment
0.50 electives or restricted electives

Semester 4 - Summer
IDEV*2300 [0.50] Theoretical Perspectives on Development
IDEV*2400 [0.50] Development, Social Justice and Human Rights
1.50 electives or restricted electives

Summer Semester
COOP*1000 [0.50] Co-op Work Term I
COOP*2000 [0.50] Co-op Work Term II

Semester 5 - Winter
IDEV*3100 [0.50] Achieving Sustainable Development
2.00 electives or restricted electives

Semester 6 - Summer
IDEV*3300 [0.50] Engaging in Development Practice
IDEV*3400 [0.50] Managing and Evaluating Change in Development
1.50 electives or restricted electives

Semester 7 - Fall
IDEV*3000 [0.50] Poverty and Inequality
2.00 electives or restricted electives

Winter Semester
COOP*3000 [0.50] Co-op Work Term III
COOP*4000 [0.50] Co-op Work Term IV

Summer Semester
IDEV*4000 [1.00] Development in Action
IDEV*4600 [0.50] Advocating and Effecting Change in Development Policy and Practice
1.00 electives or restricted electives

Restricted Electives
1.00 credits from the following (core):
- ECON*2650 [0.50] Introductory Development Economics
- GEOG*3050 [0.50] Development and the City
- POLS*3320 [0.50] Politics of Aid & Development
- POLS*3790 [0.50] International Political Economy
- SOAN*3680 [0.50] Perspectives on Development
1.50 credits from the following (Area of Emphasis):
- ECON*2100 [0.50] Economic Growth and Environmental Quality
- ENV*2120 [0.50] Introduction to Environmental Stewardship
- FARE*2700 [0.50] Survey of Natural Resource Economics
- GEOG*3020 [0.50] Global Environmental Change
- GEOG*3090 [0.50] Gender and Environment
- HIST*3460 [0.50] Natural Disasters in Global History
- IDEV*4100 [0.50] Thesis in International Development Studies I
- IDEV*4150 [0.50] Thesis in International Development Studies II
- POLS*3370 [0.50] Environmental Politics and Governance
- SOAN*4250 [0.50] Energy and Society

Italian (ITAL)

School of Languages and Literatures, College of Arts

All language courses carry 0.50 credits. Students with Year 4 or grade 12 Italian or their equivalent may be admitted into ITAL*1000 or ITAL*1070 only with the approval of the department. Students advancing in a Romance language (French, Spanish, Italian) are advised to take elective courses in a second Romance language and in Latin. All language students are strongly advised to include CLAS*1000 and LING*1000 among their electives in order to derive the maximum benefit from their studies. Except where stated otherwise, literary texts are, at all levels, studied in the original language. Students registering in these courses will be expected to have the appropriate knowledge.

Study Abroad

The School of Languages and Literatures encourages students in modern languages to spend 1 or 2 semesters in another country to study a particular language at the university level. Credit for programs of study successfully completed may be applied towards the University of Guelph degree requirements. Requests should be addressed well in advance to either the School or a particular section of the School. A letter of permission is required to either the School or a particular section of the School. A letter of permission is required (see Section VIII—Undergraduate Degree Regulations and Procedures.)

Italian may be taken as a minor in the honours program. Students in Italian will be counselled by the School of Languages and Literatures.

Minor (Honours Program)

A minimum of 5.00 credits is required, including:
- HUMN*2020 [0.50] The Criminal Mind in Italian Cinema
- ITAL*1060 [0.50] Introductory Italian I
- ITAL*1070 [0.50] Introductory Italian II

ITAL*2090 [0.50] Intermediate Italian
ITAL*3060 [0.50] Advanced Italian
ITAL*3400 [0.50] Renaissance Lovers and Fools
ITAL*3700 [0.50] Experiential Learning and Language
ITAL*4900 [0.50] Research Project in Italian Studies

1.00 Credits from:
- ARTH*2540 [0.50] Medieval Art
- ARTH*2550 [0.50] The Italian Renaissance
- ARTH*2950 [0.50] Baroque Art
- ARTH*3150 [0.50] Space: Roman Art and Urbanism
- ARTH*3320 [0.50] Lives: Aspects of Western Art
- ARTH*3340 [0.50] Studies in Renaissance and Baroque Art
- CLAS*1000 [0.50] Introduction to Classical Culture
- CLAS*2000 [0.50] Classical Mythology
- HIST*2200 [0.50] The Medieval World
- HIST*2850 [0.50] Ancient Greece and Rome
- HIST*3750 [0.50] The Reformation
- HUMN*1030 [0.50] What Makes a Literary Classic?
- HUMN*3000 [0.50] Narratives of Migration
- LAT*1100 [0.50] Preliminary Latin I
- LAT*1110 [0.50] Preliminary Latin II
- LAT*2000 [0.50] Latin Literature
- LING*1000 [0.50] Introduction to Linguistics
- PHIL*2140 [0.50] Ancient Greek Philosophy
- PHIL*3060 [0.50] Medieval Philosophy

Marketing (MKTG)

Department of Marketing and Consumer Studies, Gordon S. Lang School of Business and Economics

The minor in Marketing is designed for students who wish to better understand the subject of marketing and potentially integrate this with their primary field of study. The program develops a core knowledge of contemporary theory and principles of marketing and consumer behaviour of particular relevance to the non-specialist. Note: the minor in Marketing is not open to students enrolled in the Marketing Management major in the Bachelor of Commerce degree.

Minor (Honours Program)

A minimum of 5.00 credits is required, including:
- ECON*1050 [0.50] Introductory Microeconomics
- HROB*2090 [0.50] Individuals and Groups in Organizations
- MCS*1000 [0.50] Introductory Marketing
- MCS*2600 [0.50] Fundamentals of Consumer Behaviour
- MCS*3000 [0.50] Advanced Marketing
- PSYC*1000 [0.50] Introduction to Psychology

Restricted Electives

2.00 restricted electives:
- ECON*2740 [0.50] Economic Statistics
- MCS*3010 [0.50] Quality Management
- MCS*3030 [0.50] Research Methods
- MCS*3500 [0.50] Marketing Analytics
- MCS*3600 [0.50] Consumer Information Processes
- MCS*3620 [0.50] Marketing Communications
- MCS*4040 [0.50] Management in Product Development
- MCS*4300 [0.50] Marketing and Society
- MCS*4400 [0.50] Pricing Management
- MCS*4600 [0.50] International Marketing
- PSYC*1010 [0.50] Making Sense of Data in Psychological Research
- STAT*2060 [0.50] Statistics for Business Decisions

*NOTE: only one of ECON*2740, PSYC*1010 or STAT*2060 may be counted as a restricted elective towards the minor in Marketing.

Mathematical Economics (MAEC)

Department of Economics and Finance, Gordon S. Lang School of Business and Economics

Most economic theory rests on explicit, formal, mathematical and/or statistical foundations. This specialization articulates and emphasizes these interactions. It is most suitable for students who either have, or wish to develop, a strong analytical background.

Major (Honours Program)

Semester 1
- CIS*1500 [0.50] Introduction to Programming
- ECON*1050 [0.50] Introductory Microeconomics
- MATH*1200 [0.50] Calculus I
1.00 electives

Semester 2
- ECON*1100 [0.50] Introductory Macroeconomics
- MATH*1210 [0.50] Calculus II
Mathematical Economics (Co-op) (MAEC:C)

Department of Economics and Finance, Gordon S. Lang School of Business and Economics

Most economic theory rests on explicit, formal, mathematical and/or statistical foundations. This specialization articulates and emphasizes these interactions. It is most suitable for students who either have, or wish to develop, a strong analytical background.

Program Requirements

The Co-op program in Mathematical Economics is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to cumulative average requirements after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

Mathematical Economics Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>Academic Semester 4</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>COOP*4000 Work Term IV</td>
<td>COOP*5000 Work Term V</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (22.00 Total Credits)*

13.00 – Required Core Courses
1.50 - Humanities credits from at least two subject areas (BA distribution requirement)
0.50 - Social Science credit outside of ECON (BA distribution requirement)
0.50 - Social Science credit outside of ECON (BA distribution requirement)

5.00 – Electives
2.00 - Co-op Work Terms

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. A fifth Co-op work term is optional and if completed, the total number of credits will equal 22.50

The recommended program sequence is outlined below.

Major (Honours Program)

Semester 1 - Fall
CIS*1500 [0.50] Introduction to Programming
ECON*1050 [0.50] Introductory Macroeconomics
MATH*1200 [0.50] Calculus I
1.00 electives

Semester 2 - Winter
ECON*1100 [0.50] Introductory Macroeconomics
MATH*1200 [0.50] Calculus II
1.50 electives

Semester 3 - Fall
COOP*1100 [0.00] Introduction to Co-operative Education
ECON*2310 [0.50] Intermediate Microeconomics
ECON*2410 [0.50] Intermediate Microeconomics
STAT*2040 [0.50] Statistics I
1.00 electives

Semester 4 - Winter
ECON*3740 [0.50] Introduction to Econometrics
2.00 electives or restricted electives*

Spring/Summer
COOP*1000 [0.50] Co-op Work Term I
Fall
COOP*2000 [0.50] Co-op Work Term II

Semester 5 - Winter
ECON*3100 [0.50] Game Theory
ECON*3810 [0.50] Advanced Macroeconomics
1.50 electives or restricted electives*

Spring/Summer
COOP*3000 [0.50] Co-op Work Term III
Semester 6 - Fall
ECON*3710 [0.50] Advanced Microeconomics
2.00 electives or restricted electives*

Winter
COOP*4000 [0.50] Co-op Work Term IV
Spring/Summer
COOP*5000 [0.50] Co-op Work Term V

Semester 7 - Fall
ECON*4640 [0.50] Advanced Econometrics
ECON*4700 [0.50] Advanced Topics in Microeconomics
ECON*4710 [0.50] Advanced Topics in Microeconomics
1.00 electives or restricted electives*

Semester 8 - Winter
ECON*4810 [0.50] Advanced Topics in Macroeconomics
One of:
ECON*4840 [0.50] Financial Econometrics
MATH*3200 [0.50] Real Analysis
STAT*4340 [0.50] Statistical Inference
STAT*4350 [0.50] Applied Multivariate Statistical Methods
STAT*4360 [0.50] Applied Time Series Analysis
0.50 credits in Economics at the 4000 level
1.00 electives

*at least 1.00 credits of the 4.00 restricted electives credits must be from Mathematics and 1.00 credits must be from Statistics. The remaining 2.00 credits can be from either subject area. Of the 4.00 credits, at least 1.00 credits must be at the 3000 level or above and the remaining 3.00 credits must be at the 2000 level or above.

Note: Courses from MATH or STATS will be allowed with the appropriate prerequisites, or by permission of the instructor.

Mathematical Science (MSCI)

Department of Mathematics and Statistics, College of Engineering and Physical Sciences

The recommended program sequence is outlined below.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ECON*4810 [0.50] Advanced Topics in Macroeconomics</td>
<td>One of: ECON*4840 [0.50] Financial Econometrics</td>
<td>MATH*3200 [0.50] Real Analysis</td>
</tr>
<tr>
<td></td>
<td>MATH*2040 [0.50] Statistics I</td>
<td></td>
<td>STAT*4080 [0.50] Data Analysis</td>
</tr>
<tr>
<td></td>
<td>STAT*4340 [0.50] Statistical Inference</td>
<td></td>
<td>STAT*4350 [0.50] Applied Multivariate Statistical Methods</td>
</tr>
<tr>
<td></td>
<td>STAT*4360 [0.50] Applied Time Series Analysis</td>
<td></td>
<td>STAT*4360 [0.50] Applied Time Series Analysis</td>
</tr>
<tr>
<td>0.50 credits in Economics at the 4000 level</td>
<td>1.00 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*at least 1.00 credits of the 4.00 restricted electives credits must be from Mathematics and 1.00 credits must be from Statistics. The remaining 2.00 credits can be from either subject area. Of the 4.00 credits, at least 1.00 credits must be at the 3000 level or above and the remaining 3.00 credits must be at the 2000 level or above.

Note: Courses from MATH or STATS will be allowed with the appropriate prerequisites, or by permission of the instructor.

Department of Mathematics and Statistics, College of Engineering and Physical Sciences

The recommended program sequence is outlined below.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ECON*4810 [0.50] Advanced Topics in Macroeconomics</td>
<td>One of: ECON*4840 [0.50] Financial Econometrics</td>
<td>MATH*3200 [0.50] Real Analysis</td>
</tr>
<tr>
<td></td>
<td>MATH*2040 [0.50] Statistics I</td>
<td></td>
<td>STAT*4080 [0.50] Data Analysis</td>
</tr>
<tr>
<td></td>
<td>STAT*4340 [0.50] Statistical Inference</td>
<td></td>
<td>STAT*4350 [0.50] Applied Multivariate Statistical Methods</td>
</tr>
<tr>
<td></td>
<td>STAT*4360 [0.50] Applied Time Series Analysis</td>
<td></td>
<td>STAT*4360 [0.50] Applied Time Series Analysis</td>
</tr>
<tr>
<td>0.50 credits in Economics at the 4000 level</td>
<td>1.00 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*at least 1.00 credits of the 4.00 restricted electives credits must be from Mathematics and 1.00 credits must be from Statistics. The remaining 2.00 credits can be from either subject area. Of the 4.00 credits, at least 1.00 credits must be at the 3000 level or above and the remaining 3.00 credits must be at the 2000 level or above.

Note: Courses from MATH or STATS will be allowed with the appropriate prerequisites, or by permission of the instructor.
Major (Honours Program)
Knowledge of Mathematics and Statistics is crucial for understanding our world. This unique program provides a core of both mathematics and statistics with a choice of a Mathematics stream or a Statistics stream. This major also requires the completion of an area of emphasis as listed. Students are encouraged to speak with a Program Counsellor when choosing courses for the selected stream and area of emphasis.

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor. A total of 20.00 credits is required to complete the Major which includes at least 10.00 credits in Mathematics & Statistics, 0.50 credits in Computing and Information Science, and an additional 2.50 credits in an area of emphasis. Of the total credits required, students are required to complete 2.00 Mathematics and/or Statistics credits at the 4000 level and an additional 3.00 Mathematics and/or Statistics credits must be at the 3000 or 4000 level.

Note: Students majoring in Mathematical Science cannot minor in Mathematics or Statistics.

Semester 1
MATH*1160 [0.50] Linear Algebra I
MATH*1200 [0.50] Calculus I
1.50 credits selected from the College of Arts and the College of Social and Applied Human Sciences*

Note: MATH*1080 or IPS*1500 can be taken in place of MATH*1200

Semester 2
MATH*1210 [0.50] Calculus II
STAT*2040 [0.50] Statistics I
1.50 electives** (PHL*2110 is recommended)

Note: MATH*1090 or IPS*1510 can be taken in place of MATH*1210

Semester 3
MATH*2200 [0.50] Advanced Calculus I
STAT*3100 [0.50] Introductory Mathematical Statistics I
One of:
CIS*1300 [0.50] Programming
CIS*1500 [0.50] Introduction to Programming
1.00 electives or restricted electives

Semester 4
MATH*2130 [0.50] Numerical Methods
STAT*2050 [0.50] Statistics II
1.50 electives or restricted electives (CIS*2500 is recommended)

Semester 5
2.50 electives or restricted electives

Semester 6
2.50 electives or restricted electives

Semester 7
2.50 electives or restricted electives

Semester 8
MATH*4440 [0.50] Case Studies in Mathematics and Statistics
2.00 electives or restricted electives

*These courses should be chosen from the list of Semester 1 requirements as listed in the Program Regulations for the BA.

**Students are reminded that they must meet the BA distribution requirements of 1.50 credits in the humanities and 1.50 credits in the social sciences.

Students are required to complete 5.50 credits from either the Mathematics Stream or the Statistics Stream as follows:

Mathematics Stream
MATH*2000 [0.50] Proofs, Sets, and Numbers
MATH*2210 [0.50] Advanced Calculus II
MATH*2270 [0.50] Applied Differential Equations
MATH*3160 [0.50] Linear Algebra II
MATH*3200 [0.50] Real Analysis

3.00 additional credits in MATH or STAT at 3000 level or above of which at least 1.50 credits must be MATH at the 4000 level

Statistics Stream
STAT*3110 [0.50] Introductory Mathematical Statistics II
STAT*3240 [0.50] Applied Regression Analysis
0.50 additional credits in MATH at 2000 level or above
1.00 additional credits in MATH or STAT at 2000 level or above
3.00 additional credits in MATH or STAT at 3000 level or above of which at least 1.50 credits must be STAT at the 4000 level

Areas of Emphasis
Students are required to complete 2.50 credits from one of the following Areas of Emphasis:
Each Area of Emphasis is 2.50 credits from a single field of study.

MINOR PROGRAMS

ECONOMICS (ECON)***
The following credits must be taken:
ECON*1050 [0.50] Introductory Microeconomics
ECON*1100 [0.50] Introductory Macroeconomics
ECON*2310 [0.50] Intermediate Microeconomics
at least 1.00 credits from:
ECON*3100 [0.50] Game Theory
ECON*3710 [0.50] Advanced Microeconomics
ECON*4710 [0.50] Advanced Topics in Microeconomics

INDIVIDUALIZED (IND)***
It is required that 2.50 credits are taken from humanities and social science electives where 1.00 credit must be at the 3000 level or above.

Students declaring an Individualized Area of Emphasis must have their choice of 2.50 credits approved by an academic advisor.

*** Students are reminded that they must meet the BA requirement that at least 7.00 credits must be at the 3000 level of above.

Mathematics (MATH)
Department of Mathematics and Statistics, College of Engineering and Physical Sciences
Knowledge of mathematics is crucial for understanding our world. Students can choose to study mathematics as a minor in the B.A. Honours Program or as an area of concentration in the General Program. These specializations are designed to provide considerable flexibility for students to pursue their own mathematical interests, whether they be in the concepts of "pure" mathematics or techniques and applications. The Mathematics specializations develop skills that are valued in many sectors such as business, education, government, and industry.

Area of Concentration (General Program)
A minimum of 5.00 Mathematics credits is required, including:

a. 4.00 credits in Mathematics, including at least 1.00 from courses at the 3000 level or above
b. 1.00 additional credits from Mathematics, Statistics and/or Computing Science

Minor (Honours Program)
A total of 5.00 credits is required to complete the Minor including:

(MATH*1080 or MATH*1200)*
(MATH*1090 or MATH*1210)**

MATH*1160 [0.50] Linear Algebra I
MATH*2000 [0.50] Proofs, Sets, and Numbers
MATH*2200 [0.50] Advanced Calculus I
STAT*2040 [0.50] Statistics I
0.50 additional Mathematics credits at the 2000 level or above
1.50 additional Mathematics credits at the 3000 or 4000 level

* IPS*1500 can count toward this 0.50 credit
** IPS*1510 can count toward this 0.50 credit

Note: Students majoring in Mathematical Science cannot minor in Mathematics.

Media & Cinema Studies (MCST)
College of Arts
This minor considers the various approaches to media, communication, and culture. By examining conventions used across media forms and texts, students are expected to demonstrate an understanding of the relationship between form and content, media and society, technology and culture. Attention will be given to cinema, sound/music, visual culture, and digital/Internet texts and practices. The minor in Media and Cinema Studies (MCST) guides students to an understanding of the pertinent questions at stake in today’s technological and information-focused environments.

Minor (Honours Program)
A minimum of 5.00 credits is required, including:

ARTH*2220 [0.50] The Visual Arts Today
THST*1200 [0.50] The Languages of Media
Courses in Music are offered in several of the semesters abroad, especially London. Credit for programs of study successfully completed may be applied towards the University of Guelph degree requirements.

**Applied Music**

MUSC*1500 is available only by audition. MUSC*1500 is restricted to students in Semesters 1-4 who are enrolled in a Music program: general program, area of concentration; honours program, major or minor. Students enrolled in a Music program, honours major, may audition for MUSC*1500 beyond the fourth semester.

Applied Music courses are designed to be taken during successive Fall and Winter terms. If this sequence is interrupted for more than one semester, students may be required to reapply (re-audition) before registering to continue in Applied Music. Students must achieve a minimum grade 70% in Applied Music courses in order to proceed to the next level.

**Core Requirements**

The Music core is designed to provide the concepts and skills students need for successful study in higher level courses. All students in honours program major must complete the following courses:

- **MUSC*1060** [0.50] Amadeus to Zeppelin: Music and Culture I
- **MUSC*1180** [0.50] Musicianship I
- **MUSC*2100** [0.50] Creating Music on the Computer
- **MUSC*2140** [0.50] History of Jazz
- **MUSC*2150** [0.50] Music and Popular Culture
- **MUSC*2180** [0.50] Musicianship II
- **MUSC*2270** [0.50] World Music
- **MUSC*2330** [0.50] Beethoven to Broadway: Music and Culture II
- **MUSC*2660** [0.50] Materials of Music I
- **MUSC*3010** [0.50] Materials of Music II
- **MUSC*3630** [0.50] Tragedy, Technology, and Torture: Music Post 1900

**Area of Concentration (General Program)**

A minimum of 6.00 Music credits is required, including:

a. **MUSC*1060, MUSC*1180, MUSC*2100, MUSC*2330, MUSC*2660, MUSC*3010** (3.00 credits)

b. 1.50 credits from **MUSC*2100, MUSC*2140, MUSC*2150, MUSC*2270, MUSC*3630**

c. at least 1.00 Music credits at the 3000 level or above (excluding MUSC*3630)

d. two of **MUSC*2530, MUSC*2540, MUSC*2550, MUSC*2560**.

**Major (Honours Program)**

A minimum of 9.00 Music credits is required, including:

a. the Music core (5.50 credits)

b. two of **MUSC*2530, MUSC*2540, MUSC*2550, MUSC*2560**.

c. (MUSC*4460 and MUSC*4470) or MUSC*4450

d. 2.00 additional credits of upper-level topics courses ( MUSC*3730, MUSC*3740, MUSC*3800, MUSC*3820, MUSC*3860, MUSC*3880)

**Participation in Applied Music courses is strongly recommended for all honours students. Students contemplating graduate studies in Music should consult music faculty early in their program.**

Music majors are advised to take MUSC*1180 in Fall Year 1, followed by MUSC*2180 in Winter Year 1.

**Minor (Honours Program)**

A minimum of 5.00 Music credits is required, including:

a. **MUSC*1060** [0.50] Amadeus to Zeppelin: Music and Culture I

b. **MUSC*1180** [0.50] Musicianship I

c. **MUSC*2030** [0.50] Music in Canada

**One of:**

- **MUSC*2100** [0.50] Creating Music on the Computer
- **MUSC*2140** [0.50] History of Jazz
- **MUSC*2150** [0.50] Music and Popular Culture
- **MUSC*2220** [0.50] Electronica: Music in the Digital Age
- **MUSC*2270** [0.50] World Music

**Participation in Applied Music courses is strongly recommended for all honours students. Students contemplating graduate studies in Music should consult music faculty early in their program.**

Music majors are advised to take MUSC*1180 in Fall Year 1, followed by MUSC*2180 in Winter Year 1.

**Philosophy (PHIL)**

**Department of Philosophy, College of Arts**
Our programs are designed to educate students about philosophical discussions of central questions in ethics, political philosophy, theory of knowledge, metaphysics and philosophy of science, among other areas. This includes learning the history of these subjects as well as understanding current debates. In gaining this knowledge students develop crucial skills of articulation, critical thinking, intellectual independence and the ability to understand others’ viewpoints and assumptions. It is important that students discuss their programs with a Faculty Advisor (https://www.uoguelph.ca/uaic/facultyadvisors-ba) in order to ensure that the best selection of elective Philosophy courses is made. This is especially important for students who are contemplating graduate work in Philosophy.

Students may take PHIL*1000, PHIL*1100, PHIL*1030 and PHIL*1050 but only two may be counted towards the minimum number of Philosophy courses required for a degree.

**Area of Concentration (General Program)**

5.00 Philosophy credits are required, as follows:

- PHIL*2240 [0.50] Knowledge and Belief
- PHIL*2370 [0.50] Metaphysics and Mind

One of:

- PHIL*2120 [0.50] Ethics
- PHIL*2280 [0.50] Key Concepts in Political Philosophy

One of:

- PHIL*2100 [0.50] Critical Thinking
- PHIL*2110 [0.50] Formal Logic

1.50 credits in Philosophy

**Note:** Students may only count 1.00 credits at the 1000 level towards this requirement. 1.50 credits in Philosophy at the 3000 level or higher. PHIL*3280 may be used as a 3000 level Philosophy course.

**Major (Honours Program)**

8.50 Philosophy credits are required, as follows:

- PHIL*2120 [0.50] Ethics
- PHIL*2140 [0.50] Ancient Greek Philosophy
- PHIL*2160 [0.50] Early Modern Philosophy: Reason vs. Experience
- PHIL*2280 [0.50] Key Concepts in Political Philosophy
- PHIL*2370 [0.50] Metaphysics and Mind
- PHIL*3100 [0.50] Kant and His Legacy
- PHIL*4820 [0.50] Philosophy Research Presentation

One of:

- PHIL*2100 [0.50] Critical Thinking
- PHIL*2110 [0.50] Formal Logic

One of:

- PHIL*2180 [0.50] Philosophy of Science
- PHIL*2240 [0.50] Knowledge and Belief

1.50 credits in Philosophy

**Note:** Students may only count 1.00 credits at the 1000 level towards this requirement. 1.50 credits in Philosophy at the 3000 level or higher. PHIL*3280 may be used as a 3000 level Philosophy course.

1.00 credits in Philosophy at the 4000 level

**Minor (Honours Program)**

5.00 Philosophy credits are required, as follows:

- PHIL*2240 [0.50] Knowledge and Belief
- PHIL*2370 [0.50] Metaphysics and Mind

One of:

- PHIL*2120 [0.50] Ethics
- PHIL*2280 [0.50] Key Concepts in Political Philosophy

One of:

- PHIL*2100 [0.50] Critical Thinking
- PHIL*2110 [0.50] Formal Logic

1.00 credits in Philosophy

2.00 credits in Philosophy at the 3000 level or higher. PHIL*3280 may be used as a 3000 level Philosophy course.

**Political Science (POLS)**

**Department of Political Science, College of Social and Applied Human Sciences**

The Department of Political Science offers courses in the following areas: Political Thought: Canadian Politics; Public Policy, Governance, and Law; Comparative Politics; and International Relations and Global Studies. The Department of Political Science also participates in several interdisciplinary programs, including Criminal Justice and Public Policy, International Development Studies, Environmental Governance, and European Studies.

Students taking courses in Political Science may enrol initially in POLS*1150, POLS*1400, POLS*1500, the latter 2 courses providing overview and introductory treatments of particular interest to students who wish to take higher level courses in the department but who do not intend to specialize in the discipline. For students intending to pursue a general or honours specialization in Political Science, however, POLS*1150 is required.

Courses at the 2000 level provide students with essential grounding in specific areas of the discipline and are normally prerequisite for enrolment in 3000 and 4000 level courses. Students in the honours program major are required to take POLS*2650 and POLS*3650. Students in the honours program minor are required to take POLS*2650.

In addition to the requirements set out in the B.A. Program Regulations, the Department of Political Science requires that students pursuing general and honours programs successfully complete a core requirement of 2.50 credits and meet specific distribution requirements as follows:

**Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS*1150</td>
<td>[0.50]</td>
<td>Understanding Politics</td>
</tr>
<tr>
<td>POLS*2300</td>
<td>[0.50]</td>
<td>Canadian Government and Politics</td>
</tr>
</tbody>
</table>

One of:

- PHIL*2280 [0.50] Key Concepts in Political Philosophy
- POLS*2000 [0.50] Political Theory

One of:

- POLS*2080 [0.50] Development and Underdevelopment
- POLS*2100 [0.50] Comparative Politics
- POLS*2200 [0.50] International Relations

One of:

- POLS*2150 [0.50] Gender and Politics
- POLS*2250 [0.50] Public Administration and Governance
- POLS*2350 [0.50] Law from a Political Science Perspective

**Area of Concentration (General Program)**

A minimum of 5.00 credits is required, including:

- POLS*1150 [0.50] Understanding Politics
- POLS*2300 [0.50] Canadian Government and Politics

One of:

- PHIL*2280 [0.50] Key Concepts in Political Philosophy
- POLS*2000 [0.50] Political Theory

One of:

- POLS*2080 [0.50] Development and Underdevelopment
- POLS*2100 [0.50] Comparative Politics
- POLS*2200 [0.50] International Relations

One of:

- POLS*2150 [0.50] Gender and Politics
- POLS*2250 [0.50] Public Administration and Governance
- POLS*2350 [0.50] Law from a Political Science Perspective

2.50 additional credits, at least 1.50 of which must be at the 3000 level or above.

**Major (Honours Program)**

A minimum of 9.00 credits is required, including:

- POLS*1150 [0.50] Understanding Politics
- POLS*2300 [0.50] Canadian Government and Politics
- POLS*2650 [0.50] Political Inquiry and Research Methods
- POLS*3650 [0.50] Quantitative Methods of Data Analysis

One of:

- PHIL*2280 [0.50] Key Concepts in Political Philosophy
- POLS*2000 [0.50] Political Theory

One of:

- POLS*2080 [0.50] Development and Underdevelopment
- POLS*2100 [0.50] Comparative Politics
- POLS*2200 [0.50] International Relations

One of:

- POLS*2150 [0.50] Gender and Politics
- POLS*2250 [0.50] Public Administration and Governance
- POLS*2350 [0.50] Law from a Political Science Perspective

at least 0.50 credits at the 3000 level in three of the five fields in the department.

1.50 credits at the 4000 level, which must include one course from the 1.00 credit-weighted research and writing intensive seminar courses or the two courses which comprise the POLS*4970/POLS*4980 Honours Thesis sequence.

A maximum of 2.00 credits at the 4000 level may be counted towards a major in Political Science.

4000 level courses that fulfill the writing and research intensive course requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS*4050</td>
<td>[1.00]</td>
<td>Advanced Topics in Law and Politics</td>
</tr>
<tr>
<td>POLS*4070</td>
<td>[1.00]</td>
<td>Courts and Parliament</td>
</tr>
<tr>
<td>POLS*4100</td>
<td>[1.00]</td>
<td>Women, Justice and Public Policy</td>
</tr>
<tr>
<td>POLS*4140</td>
<td>[1.00]</td>
<td>Conceptions of Canada</td>
</tr>
<tr>
<td>POLS*4160</td>
<td>[1.00]</td>
<td>Multi-Level Governance in Canada</td>
</tr>
<tr>
<td>POLS*4200</td>
<td>[1.00]</td>
<td>International Political Economy</td>
</tr>
<tr>
<td>POLS*4250</td>
<td>[1.00]</td>
<td>Topics in Public Management</td>
</tr>
<tr>
<td>POLS*4260</td>
<td>[1.00]</td>
<td>Topics in Public Policy</td>
</tr>
<tr>
<td>POLS*4300</td>
<td>[1.00]</td>
<td>Human Rights, Ethics, and Development</td>
</tr>
<tr>
<td>POLS*4340</td>
<td>[1.00]</td>
<td>Nationalism, State-building and Identity</td>
</tr>
<tr>
<td>POLS*4710</td>
<td>[1.00]</td>
<td>Topics in Comparative Politics</td>
</tr>
<tr>
<td>POLS*4720</td>
<td>[1.00]</td>
<td>Topics in International Relations</td>
</tr>
</tbody>
</table>
Department of Political Science, College of Social and Applied Human Sciences

The Department of Political Science offers courses in the following areas: Political Thought; Canadian Politics; Public Policy, Governance, and Law; Comparative Politics; and International Relations and Global Studies. The Department of Political Science also participates in several interdisciplinary programs, including Criminal Justice and Public Policy, International Development Studies, Environmental Governance, and European Studies.

Program Requirements

The Co-op program in Political Science is a four and a half year program, including three work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Political Science Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>Academic Semester 6</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 7</td>
<td>COOP*3000 Work Term III</td>
<td>Off</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education website.

Credit Summary (21.50 Total Credits)*

9.00 - Required Core Courses
1.50 – Humanities credits from at least two areas (BA distribution requirement)
0.50 - Social Science credit outside of POLS (BA distribution requirement)
1.00 - Natural Science credits (BA distribution requirement)
8.00 - Electives
1.50 - Co-op Work Terms

Note: Three co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement.

The recommended program sequence is outlined below.

Major (Honours Program)

Semester 1 - Fall
POLS*1150 [0.50] Understanding Politics
2.00 electives*

Semester 2 - Winter
2.50 electives*

Semester 3 or 4 - Fall or Winter
COOP*1100 [0.00] Introduction to Co-operative Education
POLS*2300 [0.50] Canadian Government and Politics
POLS*2650 [0.50] Political Inquiry and Research Methods
One of:
POLS*2250 [0.50] Key Concepts in Political Philosophy
POLS*2000 [0.50] Political Theory
One of:
POLS*2080 [0.50] Development and Underdevelopment
POLS*2100 [0.50] Comparative Politics
POLS*2200 [0.50] International Relations
One of:
POLS*2150 [0.50] Gender and Politics
POLS*2250 [0.50] Public Administration and Governance
POLS*2350 [0.50] Law from a Political Science Perspective

*Note: These may include electives required to complete the Humanities, Social Science, Natural and Mathematical Science distribution requirements, or POLS restricted electives.

Summer Semester
COOP*1000 [0.50] Co-op Work Term I

Fall Semester
COOP*2000 [0.50] Co-op Work Term II

Semester 5 - Winter
POLS*3650 [0.50] Quantitative Methods of Data Analysis
1.50 POLS restricted electives

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
0.50 electives

Semester 6 - Summer

Two of:
- POLS*3130 [0.50] Law, Politics and Judicial Process
- POLS*3140 [0.50] Canadian Charter of Rights and Freedoms
- POLS*3320 [0.50] Politics of Aid & Development
- POLS*3370 [0.50] Environmental Politics and Governance
- POLS*3210*DE [0.50] The Constitution and Canadian Federalism
- POLS*3300*DE [0.50] Governing Criminal Justice

1.50 electives, which may include:
- POLS*3850 [0.50] Experiential Learning in Political Science
- POLS*3960 [0.50] Selected Topics in Political Science

Note: POLS*3850 and POLS*3960 are subject to faculty availability and departmental approval.

Semester 7 - Fall and Semester 8 - Fall

A minimum of 1.50 and a maximum of 2.00 credits of 4000-level POLS courses are required in semesters 7 and 8. At least 1.00 credits must come from either a 1.00 credit fourth-year seminar or the Honours Thesis sequence (POLS*4970 and POLS*4980).

Option A

1.50 POLS credits 4000-level
1.50 POLS electives
2.00 electives

Option B

2.00 POLS credits 4000-level
1.00 POLS electives
2.00 electives

Winter Semester

COOP*3000 [0.50] Co-op Work Term III

Summer Semester

No academic semester or work term.

Restricted Electives

1. At least 0.50 credits at the 3000 level in three of the five fields in the department (see field lists below).

Political Thought
- POLS*3230 [0.50] Modern Political Thought
- POLS*3710 [0.50] Politics and Sexuality

Canadian Politics
- HIST*3160 [0.50] Canadian Political History
- POLS*3050 [0.50] Canadian Campaigns & Elections
- POLS*3140 [0.50] Canadian Charter of Rights and Freedoms
- POLS*3210 [0.50] The Constitution and Canadian Federalism
- POLS*3270 [0.50] Local Government in Ontario
- POLS*3470 [0.50] Business-Government Relations in Canada

Public Policy, Governance and Law
- POLS*3130 [0.50] Law, Politics and Judicial Process
- POLS*3140 [0.50] Canadian Charter of Rights and Freedoms
- POLS*3210 [0.50] The Constitution and Canadian Federalism
- POLS*3250 [0.50] Public Policy: Challenges and Prospects
- POLS*3300 [0.50] Governing Criminal Justice
- POLS*3370 [0.50] Environmental Politics and Governance
- POLS*3440 [0.50] Corruption, Scandal and Political Ethics
- POLS*3470 [0.50] Business-Government Relations in Canada
- POLS*3670 [0.50] Comparative Public Policy and Administration

Comparative Politics
- POLS*3000 [0.50] Politics of Africa
- POLS*3060 [0.50] Politics of the Middle East and North Africa
- POLS*3080 [0.50] Politics of Latin America
- POLS*3160 [0.50] Global Gender Justice
- POLS*3320 [0.50] Politics of Aid & Development
- POLS*3410 [0.50] U.S. Politics and Government
- POLS*3440 [0.50] Corruption, Scandal and Political Ethics
- POLS*3450 [0.50] European Governments and Politics
- POLS*3670 [0.50] Comparative Public Policy and Administration
- POLS*3890 [0.50] Government and Politics of India
- POLS*3920 [0.50] Politics of China

International Relations and Global Studies
- POLS*3160 [0.50] Global Gender Justice
- POLS*3320 [0.50] Politics of Aid & Development
- POLS*3490 [0.50] Conflict and Conflict Resolution
- POLS*3790 [0.50] International Political Economy

2. 1.50 credits at the 4000 level, two of which must include either one course from the 1.00 credit-weighted research and writing intensive seminar courses or two courses which comprise the POLS*4970/POLS*4980 Honours Thesis sequence. A maximum of 2.00 credits at the 4000 level may be counted towards a major in Political Science.

4000 level courses that fulfill the Honours writing and research intensive course requirement:
- POLS*4050 [1.00] Advanced Topics in Law and Politics
- POLS*4070 [1.00] Courts and Parliament
- POLS*4100 [1.00] Women, Justice and Public Policy
- POLS*4140 [1.00] Conceptions of Canada
- POLS*4160 [1.00] Multi-Level Governance in Canada
- POLS*4200 [1.00] International Political Economy
- POLS*4250 [1.00] Topics in Public Management
- POLS*4260 [1.00] Topics in Public Policy
- POLS*4300 [1.00] Human Rights, Ethics, and Development
- POLS*4340 [1.00] Nationalism, State-building and Identity
- POLS*4710 [1.00] Topics in Comparative Politics
- POLS*4720 [1.00] Topics in International Relations
- POLS*4730 [1.00] International Relations of the Middle East
- POLS*4740 [1.00] Advanced Topics in Rights and Liberties
- POLS*4900 [1.00] Special Topics Seminar in Political Science

Note: Students interested in pursuing graduate or professional studies related to Political Science are encouraged to consider taking the POLS*4970/POLS*4980 Honours Thesis sequence. Interested students must obtain instructor consent in order to register for this option.

3. An additional 2.50 credits from courses in Political Science. Note: If 2.00 credits of 4000 level POLS courses are being completed then only an additional 2.00 credits from courses in Political Science are required.

Psychology (PSYC)

Department of Psychology, College of Social and Applied Human Sciences

The discipline of Psychology is normally associated with the social sciences, the biological sciences, and the health professions. Specialization in Psychology at Guelph is available as a B.A. Honours program major and minor and a B.A. General program area of concentration, all of which are described below, as well as a B.A. Honours programs Co-op major (PSYC.C).

Through its different undergraduate programs, the Psychology Department provides: a) a broad general education emphasizing psychological theory and methodology, with an empirical basis in course work (e.g., experiments and projects); b) an appropriate background in psychology for those who leave the University with an undergraduate degree to embark on careers in related areas; and c) a sound preparation for graduate study in Psychology. Students intending to apply to Psychology graduate programs, and those who want a structured, intensive research experience, may apply to enrol in the Honours Thesis courses (See Option B – Honours Thesis Stream). In addition, students intending to apply for admission to graduate programs in Psychology should note most graduate programs require the applicant to have at least an A- average in order to be considered for admission.

Note on Honours Courses

Courses designated with (H) are for students in Psychology Honours programs. These include: B.A. Honours Psychology (PSYC, PSYC.C) major or minor and the Neuroscience (NEUR) major or minor. A cumulative average of at least 70% in all course attempts in Psychology, NEUR major or minor, or PBC major or minor is required to enrol in H designated courses.

Advising Note

We advise students to take PSYC*1000 In their first semester and PSYC*1010 and PSYC*1500 in their second semester

The maximum number of PSYC credits students can take at each level is as follows:
- 1000 level courses: no cap
- 2000 level courses: 3.50 credits
- 3000 level courses: 3.50 credits
- 4000 level courses: 3.00 credits

Area of Concentration (General Program)

A total of 6.00 credits are required for the Psychology Area of Concentration.

Year 1

Students must complete 1.50 credits at the 1000 level in Psychology, including:
- PSYC*1000 [0.50] Introduction to Psychology
- PSYC*1010 [0.50] Making Sense of Data in Psychological Research
- PSYC*1500 [0.50] Foundational Skills for Psychology

Year 2

Students must complete 2.50 credits at the 2000 level in Psychology, including:
- PSYC*2070 [0.50] Teams, Leadership, and Professional Behaviour
- PSYC*2360 [0.50] Psychological Methods and Statistics

One of:
X. Degree Programs, Bachelor of Arts (B.A.)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*2300</td>
<td>[0.50] Principles of Learning</td>
</tr>
<tr>
<td>PSYC*2390</td>
<td>[0.50] Sensation and Perception</td>
</tr>
<tr>
<td>PSYC*2410</td>
<td>[0.50] Behavioural Neuroscience I</td>
</tr>
<tr>
<td>PSYC*2650</td>
<td>[0.50] Cognitive Psychology</td>
</tr>
</tbody>
</table>

Two of:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*2020</td>
<td>[0.50] Abnormal Psychology</td>
</tr>
<tr>
<td>PSYC*2310</td>
<td>[0.50] Social Psychology</td>
</tr>
<tr>
<td>PSYC*2450</td>
<td>[0.50] Developmental Psychology</td>
</tr>
<tr>
<td>PSYC*2740</td>
<td>[0.50] Personality</td>
</tr>
</tbody>
</table>

Year 3

Students must complete 1.50 credits at the 3000 level in Psychology, including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*3470</td>
<td>[0.50] Putting Psychology to Work</td>
</tr>
</tbody>
</table>

1.00 additional credit in PSYC at the 3000 level.

Finally, students are required to take an additional 0.50 credit in PSYC at the 2000 level or above.

Major (Honours Program)

A total of 9.00 credits are required for the Psychology major BAH.

Year 1

Students must complete 1.50 credits at the 1000 level in Psychology, including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*1000</td>
<td>[0.50] Introduction to Psychology</td>
</tr>
<tr>
<td>PSYC*1010</td>
<td>[0.50] Making Sense of Data in Psychological Research</td>
</tr>
<tr>
<td>PSYC*1500</td>
<td>[0.50] Foundational Skills for Psychology</td>
</tr>
</tbody>
</table>

Year 2

Students must complete 3.00 credits at the 2000 level in Psychology, including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*2070</td>
<td>[0.50] Teams, Leadership, and Professional Behaviour</td>
</tr>
<tr>
<td>PSYC*2360</td>
<td>[0.50] Psychological Methods and Statistics</td>
</tr>
</tbody>
</table>

Two of:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*2330</td>
<td>[0.50] Principles of Learning</td>
</tr>
<tr>
<td>PSYC*2390</td>
<td>[0.50] Sensation and Perception</td>
</tr>
<tr>
<td>PSYC*2410</td>
<td>[0.50] Behavioural Neuroscience I</td>
</tr>
<tr>
<td>PSYC*2650</td>
<td>[0.50] Cognitive Psychology</td>
</tr>
</tbody>
</table>

Two of:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*2020</td>
<td>[0.50] Abnormal Psychology</td>
</tr>
<tr>
<td>PSYC*2310</td>
<td>[0.50] Social Psychology</td>
</tr>
<tr>
<td>PSYC*2450</td>
<td>[0.50] Developmental Psychology</td>
</tr>
<tr>
<td>PSYC*2740</td>
<td>[0.50] Personality</td>
</tr>
</tbody>
</table>

OPTION A – HONOURS REGULAR STREAM

Year 3

Students must complete 3.00 credits at the 3000 level in Psychology, including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*3000</td>
<td>[0.50] Historical and Critical Perspectives on Psychology</td>
</tr>
<tr>
<td>PSYC*3250</td>
<td>[0.50] Psychological Measurement</td>
</tr>
<tr>
<td>PSYC*3290</td>
<td>[0.50] Conducting Statistical Analyses in Psychology</td>
</tr>
</tbody>
</table>

1.50 additional credit in Psychology at 3000 level.

Year 4

Students must complete 1.50 credits at the 4000 level in Psychology, including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*4540</td>
<td>[1.00] Practical Applications of Psychology</td>
</tr>
</tbody>
</table>

0.50 additional credit in Psychology at 4000 level.

OPTION B – HONOURS THESIS STREAM

The Honours Thesis stream is recommended for students considering graduate work, as most graduate programs in Psychology expect that students will have completed an undergraduate thesis or equivalent. The two honours thesis courses (PSYC*4870 and 4880) are normally taken in a Fall-Winter sequence. Registration for these courses requires Department approval, which is normally granted to those students whose academic performance meets the minimum admission requirements of Psychology graduate programs.

Year 3

Students must complete 2.50 credits at the 3000 level in Psychology, including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*3000</td>
<td>[0.50] Historical and Critical Perspectives on Psychology</td>
</tr>
<tr>
<td>PSYC*3250</td>
<td>[0.50] Psychological Measurement</td>
</tr>
<tr>
<td>PSYC*3290</td>
<td>[0.50] Conducting Statistical Analyses in Psychology</td>
</tr>
</tbody>
</table>

1.0 additional credit in Psychology at 3000 level.

Year 4

Students must complete 2.00 credits at the 4000 level in Psychology, comprised of:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*4780</td>
<td>[0.50] Advanced Research Methods and Statistics</td>
</tr>
<tr>
<td>PSYC*4870</td>
<td>[0.50] Honours Thesis I</td>
</tr>
<tr>
<td>PSYC*4880</td>
<td>[1.00] Honours Thesis II</td>
</tr>
</tbody>
</table>

Note: Students should note that the Honours Thesis courses are normally taken in a Fall-Winter sequence and are worth the equivalent of 1.50 credits toward the 20.00 credits Honours B.A. degree requirements.

Minor (Honours Program)

(May not be taken in combination with a Psychology Honours Major)

A total of 5.00 credits are required for the Psychology Minor, including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*1000</td>
<td>[0.50] Introduction to Psychology</td>
</tr>
<tr>
<td>PSYC*1010</td>
<td>[0.50] Making Sense of Data in Psychological Research</td>
</tr>
<tr>
<td>PSYC*2360</td>
<td>[0.50] Psychological Methods and Statistics</td>
</tr>
</tbody>
</table>

An additional 2.00 credits selected from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC*2020</td>
<td>[0.50] Abnormal Psychology</td>
</tr>
<tr>
<td>PSYC*2310</td>
<td>[0.50] Social Psychology</td>
</tr>
<tr>
<td>PSYC*2330</td>
<td>[0.50] Principles of Learning</td>
</tr>
<tr>
<td>PSYC*2390</td>
<td>[0.50] Sensation and Perception</td>
</tr>
<tr>
<td>PSYC*2410</td>
<td>[0.50] Behavioural Neuroscience I</td>
</tr>
<tr>
<td>PSYC*2450</td>
<td>[0.50] Developmental Psychology</td>
</tr>
<tr>
<td>PSYC*2650</td>
<td>[0.50] Cognitive Psychology</td>
</tr>
<tr>
<td>PSYC*2740</td>
<td>[0.50] Personality</td>
</tr>
</tbody>
</table>

An additional 1.50 credits at the 3000 level in Psychology.

Note: There is a maximum number of Psychology credits a student may complete. Please refer to the major for further information.

Psychology (Co-op) (PSYC:C)

Department of Psychology, College of Social and Applied Human Sciences

The discipline of Psychology is normally associated with the social sciences, the biological sciences, and the health professions. Specialization in Psychology at Guelph is available as a B.A. Honours program major and minor and a B.A. General program area of concentration, all of which are described below, as well as a B.A. Honours program Co-op major (PSYC:C).

Through its different undergraduate programs, the Psychology Department provides:

a) a broad general education emphasizing psychological theory and methodology, with an empirical basis in course work (e.g., experiments and projects); b) an appropriate background in psychology for those who leave the University with an undergraduate degree to embark on careers in related areas; and c) a sound preparation for graduate study in Psychology.

Program Requirements

The Co-op program in Psychology is a four and a half year program, including three work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Psychology Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term I</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (21.50 Total Credits)*

9.00 - Required Core Courses

1.50 – Humanities credits from at least two areas (BA distribution requirement)

0.50 - Social Science credit outside of PSYC (BA distribution requirement)

1.00 - Natural Science credits (BA distribution requirement)

8.00 - Electives

1.50 - Co-op Work Terms

Note: Three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement.

The recommended program sequence is outlined below.

Major (Honours Program)

Note: When selecting core and elective credits the student should keep in mind the prerequisites for their desired 3000- and 4000-level courses. When selecting courses beyond Psychology the student should keep in mind both their second specialization (if relevant) and courses appropriate for potential work-term placements.
Note on Honours Courses
Courses designated with (H) are for students in Psychology Honours programs. These include: B.A. Honours Psychology (PSYC, PYSC.C) major or minor, B.A. Information Systems and Human Behaviour (ISHB) major and the Neuroscience (NEUR) major or minor. A cumulative average of at least 70% in all course attempts in Psychology or registration in the ISHB major, NEUR minor, or PBC major or minor is required to enrol in H-designated courses.

A total of 9.00 credits are required for the Psychology Co-op BAH. Students must complete 1.50 credits at the 1000 level and 3.00 credits at the 2000 level in Psychology. For those in the Honours Regular Stream, students must complete 3.00 credits at the 3000 level and 1.50 credits at the 4000 level in Psychology. For those in the Honours Thesis Stream, students must complete 2.50 credits at the 3000 level and 2.00 credits at the 4000 level in Psychology.

The maximum number of PSYC credits that students can take at each level is as follows:
- 1000 level courses: no cap
- 2000 level courses: 3.50 credits
- 3000 level courses: 3.50 credits
- 4000 level courses: 3.00 credits

Students wanting to move more quickly through the program are recommended to take two DE courses in the summer of their first year and/or one DE course during each work term. If they do so, the number of electives required in Semester 8 will depend on how many additional courses the student has taken throughout the program to meet the 20.00 credit requirement.

Graduate Studies Advisory Note: Most graduate programs require the student to have at least an A- average in order to be considered for admission. They also require students to follow the Honours Thesis Stream. Students planning on applying to graduate school in Psychology will need to take the following courses in the semesters outlined below: PSYC*3250, PSYC*3290, PSYC*4780, PSYC*4870, and PSYC*4880.

Major (Honours Program)
A total of 9.00 credits are required for the Psychology major BAH.

Year 1
Semester 1 - Fall
Students should complete:
- PSYC*1000 [0.50] Introduction to Psychology
- 2.00 additional credits

Semester 2 - Winter
Students should complete:
- COOP*1100 [0.00] Introduction to Co-operative Education
- PSYC*1010 [0.50] Making Sense of Data in Psychological Research
- PSYC*1500 [0.50] Foundational Skills for Psychology
- One of:
  - PSYC*2390 [0.50] Sensation and Perception
  - PSYC*2650 [0.50] Cognitive Psychology
- One of:
  - PSYC*2020 [0.50] Abnormal Psychology
  - PSYC*2740 [0.50] Personality
- 0.50 additional credits

Summer Semester
If students want to progress more quickly through the program or plan to apply to graduate school, they should complete: 1.00 PSYC credits at the 2000 level. If not taken in the summer semester, they must be completed by the end of semester 4.

Year 2
Semester 3 - Fall
Students should complete:
- PSYC*2070 [0.50] Teams, Leadership, and Professional Behaviour
- PSYC*2360 [0.50] Psychological Methods and Statistics
- One of:
  - PSYC*2330 [0.50] Principles of Learning
  - PSYC*2410 [0.50] Behavioural Neuroscience I
- One of:
  - PSYC*2310 [0.50] Social Psychology
  - PSYC*2450 [0.50] Developmental Psychology
- 0.50 additional credits

Winter Semester
- COOP*1000 [0.50] Co-op Work Term I

Semester 4 - Summer
- 0.50 credits in PSYC at the 3000 level
- 2.00 additional credits

OPTION A – HONOURS REGULAR STREAM
Year 3
Fall Semester
- COOP*2000 [0.50] Co-op Work Term II

Semester 5 - Winter
- PSYC*3000 [0.50] Historical and Critical Perspectives on Psychology
- PSYC*3290 [0.50] Conducting Statistical Analyses in Psychology
- 1.00 additional credits in PSYC at the 3000 level
- 0.50 additional credits

Summer Semester
- COOP*3000 [0.50] Co-op Work Term III

Year 4
Semester 6 - Fall
- PSYC*3250 [0.50] Psychological Measurement
- 0.50 additional credits in PSYC at the 4000 level
- 1.50 additional credits

Semester 7 - Winter
- PSYC*4540 [1.00] Practical Applications of Psychology
- 1.50 additional credits

Semester 8 - Summer
- 2.50 credits

OPTION B – HONOURS THESIS STREAM
Year 3
Fall Semester
- COOP*2000 [0.50] Co-op Work Term II

Semester 5 - Winter
- PSYC*3000 [0.50] Historical and Critical Perspectives on Psychology
- PSYC*3250 [0.50] Psychological Measurement
- PSYC*3290 [0.50] Conducting Statistical Analyses in Psychology
- 1.00 additional credits

Summer Semester
- COOP*3000 [0.50] Co-op Work Term III

Year 4
Semester 6 - Fall
- PSYC*4780 [0.50] Advanced Research Methods and Statistics
- PSYC*4870 [0.50] Honours Thesis I
- 0.50 additional credits in PSYC at the 3000 level
- 1.00 additional credits at the 3000 or 4000 level

Semester 7 - Winter
- PSYC*4880 [1.00] Honours Thesis II
- 1.50 additional credits

Semester 8 - Summer
- 2.50 credits

Sociology (SOC)
Department of Sociology and Anthropology, College of Social and Applied Human Sciences
The Department of Sociology and Anthropology offers three types of courses: sociology courses with the prefix SOC*, anthropology courses with the prefix ANTH*, and departmental courses with the prefix SOAN*. The departmental category of courses recognizes the fact that the disciplines of sociology and sociocultural anthropology have developed in tandem and it is possible to identify large areas of overlap and convergence in the work of practitioners both historically and in the present. Departmental courses include most of the core theory and methods courses as well as many elective courses. They contribute equally to the subject matter of sociology as well as the subject matter of sociocultural anthropology for purposes of the undergraduate programs of study in both disciplines. Please see the listings for all courses required for the Sociology program.

Note: the following courses may be used towards a sociology specialization:
- FRHD*3060 [0.50] Principles of Social Gerontology
- PHIL*2180 [0.50] Philosophy of Science

Courses will normally be offered in the semesters designated. For information on other semesters these courses will be offered and the semester those courses without designations will be offered, please check with the department. In addition to regularly scheduled courses, students may elect to do independent study. A student who wishes to do a reading course should first consult the professor with whom he/she wishes to work. Please note, a student is allowed a total of 1.00 credits only for reading courses.

SOAN courses will be used towards the Sociology specializations.

Area of Concentration (General Program)
A minimum of 5.00 credits in Sociology and Anthropology is required, including:
- ANTH*1150 [0.50] Introduction to Anthropology
- SOAN*2111/2 [1.00] Classical Theory
- SOAN*2120 [0.50] Introductory Methods
Major (Honours Program)
A minimum of 8.00 credits in Sociology and Anthropology is required, including:

ANTH*1150 [0.50] Introduction to Anthropology
SOC*1100 [0.50] Sociology
SOAN*3120 [0.50] Quantitative Methods
SOC*3310 [0.50] Contemporary Theory

2.50 additional credits in SOC and SOAN courses, including at least 1.00 credits at the 3000 level

Minor (Honours Program)
A minimum of 5.00 credits in Sociology and Anthropology is required, including:

ANTH*1150 [0.50] Introduction to Anthropology
SOC*1100 [0.50] Sociology

2.50 additional credits in SOC and SOAN courses, including at least 1.00 credits at the 3000 level or above

The following courses may be used toward a sociology specialization:

FRHD*3060 [0.50] Principles of Social Gerontology
PHIL*2180 [0.50] Philosophy of Science

Spanish and Hispanic Studies (SPAH)
School of Languages and Literatures, College of Arts

The Spanish and Hispanic Studies program enables students to concentrate on the Spanish language and on Spanish and Latin American literature. Language courses provide study of the grammatical concepts required to establish and enrich reading, writing, oral and aural skills from basic through advanced levels of study. Through literature and film, students are introduced to a variety of cultural, historical, social, and political topics.

The usual first course in Spanish is SPAN*1100. Students with 4U Spanish commonly take SPAN*2000. They may be admitted into SPAN*1110 only with the approval of the Instructor or the Faculty Advisor. Students with native or near native fluency normally begin language courses with SPAN*2000.

All language students are strongly advised to includeLING*1000 in their program, and CLAS*1000 among their electives in order to derive the maximum benefit from their studies.

Study Abroad
The Spanish and Hispanic Studies program encourages its students to take advantage of the University of Guelph’s exchange programs and the semester abroad opportunities. We offer exchange programs with the University of Málaga and the University of Alcalá de Henares in Spain the Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) and the University of Guadalajara (with over 30 campuses) in Mexico and the University of San Andrés in Argentina. Students also enjoy the semester abroad opportunity every second winter in Guatemala. It is recommended that students go on exchange in their third year. In order to be eligible for an exchange, students should have completed at least SPAN*2010, SPAN*2990, SPAN*3200 and SPAN*3500. Credits successfully completed at the host university are applied towards University of Guelph degree requirements. Please see the International Study section of the undergraduate calendar and consult the Head of Spanish and Hispanic Studies for more information.

Area of Concentration (General Program)
A minimum of 5.00 credits in Spanish and Hispanic Studies is required, including:

2.00 credits from Group A:

SPAN*2040 [0.50] Culture of Spain
SPAN*2990 [0.50] Hispanic Literary Studies
SPAN*3080 [0.50] Spanish American Culture

One of:

SPAN*3220 [0.50] Literature and Arts I: Spain
SPAN*3230 [0.50] Literature and Arts II: Latin America

3.00 credits from Group B:

SPAN*1100 [0.50] Introductory Spanish I
SPAN*1110 [0.50] Introductory Spanish II
SPAN*2000 [0.50] Intermediate Spanish I
SPAN*2010 [0.50] Intermediate Spanish II
SPAN*3210 [0.50] Topics in Hispanic Studies
SPAN*3230 [0.50] Literature and Arts II: Latin America
SPAN*3240 [0.50] Topics in Hispanic Linguistics
SPAN*3500 [0.50] Advanced Spanish I

SPAN*3700 [0.50] Experimental Learning and Language
SPAN*3800 [0.50] Directed Readings in Hispanic Studies
SPAN*3810 [0.50] Directed Readings in Hispanic Studies
SPAN*4100 [1.00] Seminar in Hispanic Studies
SPAN*4410 [1.00] Senior Seminar on Latin American
SPAN*4420 [1.00] Senior Seminar on Spain or Africa
SPAN*4500 [1.00] Spanish Translation - Theory and Practice
SPAN*4840 [1.00] Research Paper in Hispanic Studies

A maximum of 0.50 credits from Group B may be substituted with courses from the following:

ARTH*2050 [0.50] Modern Latin American Art
CLAS*2000 [0.50] Classical Mythology
ENGL*2040 [0.50] Latina/o Literature and Cultural Production: Intro
EURO*1100 [0.50] European Cinema
EURO*2200 [0.50] Towards European Modernism
HIST*2920 [0.50] Republican Latin America
HIST*3150 [0.50] History and Culture of Mexico
HIST*3230 [0.50] Spain and Portugal, 1085 to 1668
HUMN*1030 [0.50] What Makes a Literary Classic?
HUMN*3000 [0.50] Narratives of Migration
LAT*1100 [0.50] Preliminary Latin I
LAT*1110 [0.50] Preliminary Latin II
LING*1000 [0.50] Introduction to Linguistics
LING*2400 [0.50] Phonetics

Students wishing to substitute required courses with courses taken abroad, or other options, should consult the Head of Spanish and Hispanic Studies.

Major (Honours Program)
A minimum of 8.00 credits in Spanish and Hispanic Studies is required, including:

3.50 credits from Group A:

SPAN*2040 [0.50] Culture of Spain
SPAN*2990 [0.50] Hispanic Literary Studies
SPAN*3080 [0.50] Spanish American Culture
SPAN*3220 [0.50] Literature and Arts I: Spain
SPAN*3230 [0.50] Literature and Arts II: Latin America

One of:

SPAN*4410 [1.00] Senior Seminar on Latin American
SPAN*4420 [1.00] Senior Seminar on Spain or Africa

4.50 credits from Group B:

SPAN*1100 [0.50] Introductory Spanish I
SPAN*1110 [0.50] Introductory Spanish II
SPAN*2000 [0.50] Intermediate Spanish I
SPAN*2010 [0.50] Intermediate Spanish II
SPAN*3210 [0.50] Topics in Hispanic Studies
SPAN*3240 [0.50] Topics in Hispanic Linguistics
SPAN*3500 [0.50] Advanced Spanish I
SPAN*3700 [0.50] Experimental Learning and Language
SPAN*3800 [0.50] Directed Readings in Hispanic Studies
SPAN*3810 [0.50] Directed Readings in Hispanic Studies
SPAN*4100 [1.00] Seminar in Hispanic Studies
SPAN*4410 [1.00] Senior Seminar on Latin American
SPAN*4420 [1.00] Senior Seminar on Spain or Africa
SPAN*4500 [1.00] Spanish Translation - Theory and Practice
SPAN*4840 [1.00] Research Paper in Hispanic Studies

A maximum of 1.00 credits from Group B may be substituted with courses from the following:

ARTH*2050 [0.50] Modern Latin American Art
CLAS*2000 [0.50] Classical Mythology
ENGL*2040 [0.50] Latina/o Literature and Cultural Production: Intro
EURO*1100 [0.50] European Cinema
EURO*2200 [0.50] Towards European Modernism
HIST*2920 [0.50] Republican Latin America
HIST*3150 [0.50] History and Culture of Mexico
HIST*3230 [0.50] Spain and Portugal, 1085 to 1668
HUMN*1030 [0.50] What Makes a Literary Classic?
HUMN*3000 [0.50] Narratives of Migration
LAT*1100 [0.50] Preliminary Latin I
LAT*1110 [0.50] Preliminary Latin II
LING*1000 [0.50] Introduction to Linguistics
LING*2400 [0.50] Phonetics

Minor (Honours Program)
A minimum of 5.00 credits in Spanish and Hispanic Studies is required, including:

2.50 credits from Group A:

SPAN*2040 [0.50] Culture of Spain
SPAN*2990 [0.50] Hispanic Literary Studies
SPAN*3080 [0.50] Spanish American Culture
SPAN*3220 [0.50] Literature and Arts I: Spain
SPAN*3230 [0.50] Literature and Arts II: Latin America
SPAN*3240 [0.50] Topics in Hispanic Linguistics
SPAN*3500 [0.50] Advanced Spanish I

SPAN*3700 [0.50] Experimental Learning and Language
SPAN*3800 [0.50] Directed Readings in Hispanic Studies
SPAN*3810 [0.50] Directed Readings in Hispanic Studies
SPAN*4100 [1.00] Seminar in Hispanic Studies
SPAN*4410 [1.00] Senior Seminar on Latin American
SPAN*4420 [1.00] Senior Seminar on Spain or Africa
SPAN*4500 [1.00] Spanish Translation - Theory and Practice
SPAN*4840 [1.00] Research Paper in Hispanic Studies

A maximum of 0.50 credits from Group B may be substituted with courses from the following:

ARTH*2050 [0.50] Modern Latin American Art
CLAS*2000 [0.50] Classical Mythology
ENGL*2040 [0.50] Latina/o Literature and Cultural Production: Intro
EURO*1100 [0.50] European Cinema
EURO*2200 [0.50] Towards European Modernism
HIST*2920 [0.50] Republican Latin America
HIST*3150 [0.50] History and Culture of Mexico
HIST*3230 [0.50] Spain and Portugal, 1085 to 1668
HUMN*1030 [0.50] What Makes a Literary Classic?
HUMN*3000 [0.50] Narratives of Migration
LAT*1100 [0.50] Preliminary Latin I
LAT*1110 [0.50] Preliminary Latin II
LING*1000 [0.50] Introduction to Linguistics
LING*2400 [0.50] Phonetics

Students wishing to substitute required courses with courses taken abroad, or other options, should consult the Head of Spanish and Hispanic Studies.
X. Degree Programs, Bachelor of Arts (B.A.)

Statistics (STAT)

Department of Mathematics and Statistics, College of Engineering and Physical Sciences,

Knowledge of statistics is crucial for understanding our world. An understanding of statistics is vital in many disciplines including psychology, sociology, political science, marketing and economics. Students can choose to study statistics as a minor in the B.A. Honours Program or as an area of concentration in the General Program.

Area of Concentration (General Program)

A minimum of 5.00 credits in Statistics and Mathematics is required, including:

a. no more than 1.00 credits from courses at the 1000 level

b. 3.00 credits in statistics (STAT), 2.00 of which must be from courses at the 3000 level or above

Recommended Courses

MATH*1200 [0.50] Calculus I
MATH*1210 [0.50] Calculus II
STAT*2040 [0.50] Statistics I
STAT*2050 [0.50] Statistics II
STAT*3100 [0.50] Introductory Mathematical Statistics I
STAT*3110 [0.50] Introductory Mathematical Statistics II
STAT*3240 [0.50] Applied Regression Analysis

0.50 additional credits in Statistics

0.50 additional credits in Statistics or Mathematics at the 2000 level or above

* IPS*1500 can count toward this 0.50 credit

** IPS*1510 can count toward this 0.50 credit

Note: Students majoring in Mathematical Science cannot minor in Statistics.

Studio Art (SART)

School of Fine Art and Music, College of Arts

The School offers programs that allow for concentrated study in Art History or in Studio Art, or a combination of the two disciplines.

The Studio Art program provides a thorough grounding in contemporary art practice, art history, theory, and criticism. Courses are offered in drawing, painting, photography, printmaking, sculpture, computer graphics, and experimental studio. Studio Art majors must also take a selection of courses in art history. Specific requirements are listed below.

Cost of Studio Supplies

The majority of the cost of supplies must be borne by the student. In order to permit the University to subsidize this cost and to allow for savings through discount buying, some materials are obtained through the school by payment of a lab fee. The amount of the fee is established for each semester prior to registration.

Student Counselling

Students who elect to take a substantial number of credits in Studio Art with the objective of graduate work are advised to obtain counselling from their academic advisor regarding their choices. However, in general, it is important to know that graduate studies in Studio Art normally require an in-depth knowledge of traditional and contemporary media, as well as a significant awareness of contemporary art history and theory. Students are encouraged to take electives in other disciplines from across the University to inform their Studio Art practice. Cognate electives in other disciplines in the College of Arts, such as Philosophy, History, and English will almost certainly prove an asset.

Minor

Students wishing to declare the SART minor must have a cumulative average of 70% or higher in the following courses:

SART*1050 [0.50] Foundation Studio
SART*1060 [0.50] Core Studio

One of:

SART*1510 [0.50] Art Historical Studies I
SART*1520 [0.50] Art Historical Studies II

Students who have not been admitted directly into the major must also meet these requirements in order to declare a SART major.

Major (Honours Program)

A minimum of 9.00 credits is required, including:

SART*1050 [0.50] Foundation Studio
SART*1060 [0.50] Core Studio

One of:

SART*1510 [0.50] Art Historical Studies I
SART*1520 [0.50] Art Historical Studies II

Students who elect to take a substantial number of credits in Studio Art with the objective of graduate work are advised to obtain counselling from their academic advisor regarding their choices. However, in general, it is important to know that graduate studies in Studio Art normally require an in-depth knowledge of traditional and contemporary media, as well as a significant awareness of contemporary art history and theory. Students are encouraged to take electives in other disciplines from across the University to inform their Studio Art practice. Cognate electives in other disciplines in the College of Arts, such as Philosophy, History, and English will almost certainly prove an asset.

Minor

A total of 5.00 credits is required to complete the minor, including:

SART*1050 [0.50] Foundation Studio
SART*1060 [0.50] Core Studio

One of:

SART*1510 [0.50] Art Historical Studies I
SART*1520 [0.50] Art Historical Studies II

Students who have not been admitted directly into the major must also meet these requirements in order to declare a SART major.
SART*2610 [0.50] Photography I
SART*2700 [0.50] Digital Media I: Using Vector and Raster Images
SART*2710 [0.50] Digital Media II: Animation
One of:
SART*2300 [0.50] Sculpture I
SART*2800 [0.50] Experimental Studio I

1.00 additional credits in Art History including at least 0.50 credits at the 3000 level or above.
1.00 additional credits in Studio Art including at least 0.50 credits at the 3000 level or above.
0.50 additional credits in either Studio Art (SART) or Art History (ARTH) courses.

Notes:
1. A cumulative average of at least 70% in all course attempts in Studio Arts and Art History is required in order to enter or continue in the Honours Studio Arts program.

Theatre Studies (THST)

School of English and Theatre Studies, College of Arts

The Theatre Studies program is a component of a liberal education, and is dedicated to integrating academic study and theatre practice. The program offers introductory and advanced courses that combine theory and practice with an emphasis on educating well-rounded theatre creators for both the academic and professional spheres. Students will have the opportunity to work on both scripted and devised productions and do in-depth research and analysis. Rather than a focus on individual disciplines such as acting, directing, design and technical theatre, the program integrates this knowledge into a series of variable topic courses that examine performance from various perspectives. Many of these courses have presentational or performance outcomes.

Notes:
1. A maximum of 2.00 credits in Directed Readings or Special Studies Courses (THST*3000; THST*3600) is allowed in the honours program major. A maximum of 1.00 credits in such courses is allowed in honours program minor or the general program area of concentration. Students will normally be permitted to take only 0.50 credits in Directed Readings or Special Studies courses per semester.
 Certain approved Dramatic Literature courses from the English Program within the School of English and Theatre Studies or other departments may be counted towards a degree in Theatre Studies. A list of approved courses may be obtained from the School’s website: http://www.arts.uoguelph.ca/sets/.

2. In connection with THST*1040 and some upper-level courses, students are required as part of the course to attend various specified theatre performances in cities such as Toronto, Stratford, Niagara-on-the-Lake, and London. A special fee is charged for travel to these performances and students will be notified during the first week of classes of the amount of this fee and the dates of the performances.

3. In any given semester, a student may not enroll in more than ONE production-related course at a time. These include: THST*2190, THST*3190, THST*4280.

Area of Concentration (General Program)

A minimum of 5.00 credits in Theatre Studies is required, including:

THST*1040 [0.50] Introduction to Performance
THST*1190 [0.50] Theatre Workshop I
THST*1270 [0.50] Theatre Research I
THST*2050 [0.50] Devising
THST*2270 [0.50] Theatre Research II
THST*3170 [0.50] Special Topics
1.00 additional credit in THST at the 2000 level or above
1.00 additional credit in THST at the 3000 level or above

Major (Honours Program)

A minimum of 8.50 credits in Theatre Studies is required, including:

THST*1040 [0.50] Introduction to Performance
THST*1190 [0.50] Theatre Workshop I
THST*1270 [0.50] Theatre Research I
THST*2050 [0.50] Devising
THST*2190 [1.00] Theatre Workshop II
THST*2270 [0.50] Theatre Research II
THST*3170 [0.50] Special Topics
THST*4270 [0.50] Research Seminar I
THST*4280 [1.00] Ensemble Project
1.00 additional credit in THST at the 2000 level or above
2.00 additional credits in THST at the 3000 level or above

Minor (Honours Program)

A minimum of 5.00 credits in Theatre Studies is required, including:

THST*1040 [0.50] Introduction to Performance
THST*1190 [0.50] Theatre Workshop I
THST*1270 [0.50] Theatre Research I
THST*2050 [0.50] Devising
THST*2270 [0.50] Theatre Research II
Bachelor of Arts and Sciences (B.A.S.)

The University of Guelph offers an 8 semester (20.00 credits) honors program leading to a Bachelor of Arts and Sciences (B.A.S.) degree.

The Bachelor of Arts & Sciences program is designed for students who are motivated equally by the study of Arts/Social Sciences and the Sciences, and who find challenge and satisfaction in testing the traditional boundaries of study through undergraduate level interdisciplinary work. The program meets these objectives through a unique structure that accredits students in an Arts/Social Sciences core, a Sciences core, a Subject Area core of interdisciplinary humanities and sciences courses (ASCI*), and a minor in each of the Arts/Social Sciences and the Sciences (see program information for choices of minors). The structure of the program ensures disciplinary rigour and breadth through completion of core requirements for a B.A.S. degree, concentration in two distinct minors, and concentration of learning in an academic cohort of B.A.S. students through the interdisciplinary ASCI courses in the B.A.S. core. This core is open only to students in the B.A.S. program.

Program Information

Academic Counselling

The B.A.S. program counsellor assists students in the selection of minors, interpreting program and academic regulations, and with the selection of appropriate courses for chosen minors and distribution requirements. Students should consult the counsellor when experiencing particular difficulties affecting academic standing and progress through the program. Students are encouraged to check the B.A.S. program website regularly for course information and cross-listing of acceptable credits where appropriate.

Counselling on Minors

Academic departments offer the minors in the B.A.S. program and assign faculty advisors to assist students with academic planning (e.g., a faculty advisor in the History department handles queries about a minor in History). Students should consult the appropriate faculty advisor, along with the B.A.S. Program Counsellor, when requiring advice on the completion of specialization requirements. The list of faculty advisors is available on the Undergraduate Academic Information Centre website: http://www.uoguelph.ca/auic/facultyadvisors or contact the B.A.S. Program Counsellor for further information.

Continuation of Study

To be eligible to continue in the program, students must meet the requirements for Continuation of Study as noted in Section VIII—Undergraduate Degree Regulations & Procedures of this calendar (Schedules 1 and 2).

Conditions for Graduation

To qualify for the degree Bachelor of Arts and Sciences, the student must successfully complete a minimum of 20.00 credits as identified below. In addition, students must meet the continuation of study requirements at the time of graduation and have a 60.00% cumulative average.

Distribution Requirements

This program will require the completion of 20.00 credits as indicated below, with a maximum of 7.00 credits at the 1000 level. First year core courses may be counted towards the minors.

Of the 20.00 credits required for this program, 3.00 credits must be completed at the 3000 or 4000 level, and 2.00 credits at the 4000 level. This requirement is partially fulfilled by senior level courses in the Subject Core (ASCI) requirements.

1. Science Core - 2.00 credits
2. Arts/Social Science core - 2.00 credits
3. Subject Area Core - (ASCI) - 3.00 credits
4. Arts/Social Science Minor - 5.00 credits minimum
5. Science Minor - 5.00 credits minimum
6. Free Electives - 3.00 credits

1. Science Core - 2.00 credits

When choosing their courses in the science core, students are advised to keep prerequisites for their B.A.S Science Minor in mind. For a list of suggested core science courses for each specific B.A.S Science Minor, please consult the B.S. Science Minor, [https://www.uoguelph.ca/bas/](https://www.uoguelph.ca/bas/)

2. Arts and Social Science Core - 2.00 credits

a. 1.00 credits over at least 2 different subject areas in the College of Arts: ARTH - Art History; CHIN - Mandarin; CLAS - Classical Studies; ENGL - English; EURO - European Studies; FREN - French Studies; GERM - German Studies; GREK - Greek; HIST - History; HUMAN - Humanities; ITAL - Italian Studies; LATIN - Latin Studies; LING - Linguistics; MUSIC - Music; PHIL - Philosophy; PORT - Portuguese; SART - Studio Art; SPAN - Spanish and Hispanic Studies; THST - Theatre Studies.

b. 1.00 credits over at least 2 different subject areas (listed below) in the College of Social and Applied Human Sciences or Gordon S. Lang School of Business and Economics: ANTH - Anthropology; ECON - Economics; FRHD - Family Relations and Human Development; GEOG - Geography; IDEV - International Development Studies; ISS - Interdisciplinary Social Science; POLS - Political Science; PSYC - Psychology; SOAN - Sociology and Anthropology; SOC - Sociology; UNIV - Interdisciplinary University; WMST - Women Studies.

3. Subject Area Core (ASCI) - 3.00 credits

• 1.50 credits from:
  - ASCI*1110 [0.50] Society and Inquiry I
  - ASCI*1120 [0.50] Society and Inquiry II
  - ASCI*2050 [0.50] Uses of Knowledge

• 0.50 credits from:
  - ASCI*3000 [0.50] Arts and Sciences Community Project
  - ASCI*3100 [0.50] Case Studies in Arts and Sciences Research
  - ASCI*3700 [0.50] Independent Studies in Arts/Sciences

• 1.00 credits from:
  - ASCI*4010 [1.00] Arts and Sciences Honours Research Seminar
  - ASCI*4020 [0.50] Topics in Arts and Sciences Research
  - ASCI*4030 [0.50] Topics in Arts and Sciences Research
  - ASCI*4700 [0.50] Independent Studies in Arts/Sciences
  - ASCI*4710 [0.50] Independent Studies in Arts/Sciences

4. Arts/Social Sciences Minors - 5.00 credits (Minimum)

Minors available in the Arts/Social Sciences core (see B.A. program descriptions):

- Anthropology
- Art History
- Business
- Business Economics
- Classical Studies
- Criminal Justice & Public Policy
- Economics
- English
- European Culture and Civilization
- Family & Child Studies
- French Studies
- Geography
- German
- History
- International Development
- Italian
- Marketing
- Media and Cinema Studies
- Museum Studies
- Music
- Philosophy
- Political Science
- Psychology
- Sociology
- Spanish and Hispanic Studies
- Theatre Studies

5. Science Minor - 5.00 credits (Minimum)

Minors available in the Science core (see B.Sc. program descriptions):

- Agriculture (see B.Sc.(Agr.) program description)
- Biochemistry
Biology  
Biotechnology  
Chemistry  
Computing & Information Science  
Ecology  
GIS* & Environmental Analysis  
Mathematics  
Mathematical Science  
Microbiology  
Molecular Biology and Genetics  
Neuroscience  
Nutritional and Nutraceutical Sciences  
Physics  
Plant Science  
Statistics  
Zoology  

* Geographic Information Systems

Note: Students cannot select Psychology or Mathematics for both their B.Sc. and B.A. minors.

6. Free Electives - 3.00 credits
The program includes 3.00 free electives. Electives may be completed in any subject area.

Double Counting Rule
A maximum of 3.00 credits may be double-counted:

a. 1.00 credits may be double-counted between minors.

b. Up to 1.00 credits may be double-counted between the science core and a minor; and up to 1.00 credits may be double-counted between the arts and social science core and a minor.

Students may not triple-count a course between a core and two minors.
Bachelor of Bio-Resource Management Degree (B.B.R.M.)

The University of Guelph offers a 20.00 credit program, normally completed over 8 semesters, leading to a Bachelor of Bio-Resource Management degree (B.B.R.M.). This degree is a unique blend of applied and theoretical learning, with an emphasis on experiential learning opportunities. This degree offers three majors: Environmental Management, Equine Management, and Food Industry Management.

Program Information

The Bachelor of Bio-Resource Management degree program combines business studies and technical training with a strong emphasis on hands-on learning. A solid foundation in applied aspects of science, technology, and business provides graduates with sufficient breadth and expertise to become competent managers in the environmental or food industry fields. Students begin studying in one of the following management majors during the first semester: Environmental Management, Equine Management, or Food Industry Management.

Students will be encouraged to integrate their academic program with a well-planned series of employment activities in the summer months and to develop their leadership and interpersonal skills in on-campus and community activities. There is a strong commitment in the curriculum to personal development and students are encouraged to identify goals that they wish to accomplish throughout their university career.

Academic Advising and Counselling

Program Counselling

The Bachelor of Bio-Resource Program Counsellor is available to assist in-course students who require information or advice about their program or other academic regulations and who seek information about resources available to students. For information about how to contact a program counsellor, and for more information about program counselling, see Section VII -- Academic Counselling of the current Undergraduate Calendar.

Departmental Advising

On entering the program all students are assigned to a faculty advisor who will mentor them throughout their studies. The faculty advisor is familiar with the academic requirements of the program and is aware of career opportunities. Students are strongly encouraged to attend all meetings called by their advisor, and to set up individual meetings with him/her when they have questions or concerns about their performance or progress in the program.

Continuation of Study

Students are advised to consult the regulations for Continuation of Study which are outlined in detail in Section VIII -- Undergraduate Degree Regulations & Procedures in the current calendar.

Conditions for Graduation

To qualify for the degree Bachelor of Bio-Resource Management, the student must successfully complete a minimum of 20.00 credits as set out in the Schedule of Studies as listed. In addition, students must meet the continuation of study requirements at the time of graduation and have a minimum cumulative average of 60%.

Schedule of Studies

Courses specified in the Schedule of Studies are required courses and must be successfully completed. A full time course load normally includes 2.50 credits.

B.B.R.M. Program Regulations

Recommendations

Students entering Environmental Management or Equine Management who are deficient in Level Mathematics or Chemistry should consult with the program counsellor.

Environmental Management Major (EM)

School of Environmental Sciences and Department of Food, Agricultural and Resource Economics, Ontario Agricultural College

The major in Environmental Management focuses on the development of leaders in the areas of environmental science and technology. The program combines a solid background in environmental science and management with business, using a mix of theoretical and applied study. The flexibility provided in semesters 6 through 8 permits students to develop their understanding of specific areas of environmental science and business or take a variety of areas within the discipline. This flexibility also allows students to participate in international exchanges and semesters abroad. Students have the opportunity to incorporate a variety of field trips, experiential learning in the workplace and independent research projects into their program.

This major will require the completion of 20.00 credits: 12.00 from required courses, 6.00 from restricted electives, and 2.00 free electives. Of these credits, a minimum of 6.00 credits are required at the 3000 level or higher, of which at least 2.00 credits must be at the 4000 level.

Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1070</td>
<td>0.50</td>
<td>Discovering Biodiversity</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>0.50</td>
<td>General Chemistry I</td>
</tr>
</tbody>
</table>

Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT*1220</td>
<td>0.50</td>
<td>Introductory Financial Accounting</td>
</tr>
<tr>
<td>BIOL*1090</td>
<td>0.50</td>
<td>Introduction to Molecular and Cellular Biology</td>
</tr>
<tr>
<td>FARE*1040</td>
<td>1.00</td>
<td>Intro to Environmental Economics, Law &amp; Policy</td>
</tr>
<tr>
<td>HROB*2090</td>
<td>0.50</td>
<td>Individuals and Groups in Organizations</td>
</tr>
</tbody>
</table>

Semester 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2060</td>
<td>0.50</td>
<td>Ecology</td>
</tr>
<tr>
<td>ENVS*2060</td>
<td>0.50</td>
<td>Soil Science</td>
</tr>
<tr>
<td>ENVS*2230</td>
<td>0.50</td>
<td>Communications in Environmental Science</td>
</tr>
<tr>
<td>FARE*2700</td>
<td>0.50</td>
<td>Survey of Natural Resource Economics</td>
</tr>
<tr>
<td>GEOG*2480</td>
<td>0.50</td>
<td>Mapping and GIS</td>
</tr>
</tbody>
</table>

Semester 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVM*3500</td>
<td>1.00</td>
<td>Environmental Management Integrated Project</td>
</tr>
<tr>
<td>ENVS*2040</td>
<td>0.50</td>
<td>Plant Health and the Environment</td>
</tr>
<tr>
<td>ENVS*2080</td>
<td>0.50</td>
<td>Introduction to Environmental Microbiology</td>
</tr>
</tbody>
</table>

Semester 5

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*2420</td>
<td>0.50</td>
<td>The Earth From Space</td>
</tr>
<tr>
<td>ENVS*3020</td>
<td>0.50</td>
<td>Pesticides and the Environment</td>
</tr>
<tr>
<td>ENVS*3060</td>
<td>0.50</td>
<td>Groundwater</td>
</tr>
</tbody>
</table>

Semester 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*3090</td>
<td>0.50</td>
<td>Environmental Microbiology</td>
</tr>
<tr>
<td>BIOL*3140</td>
<td>0.50</td>
<td>Environmental Physiology</td>
</tr>
</tbody>
</table>

Semester 7

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*3140</td>
<td>0.50</td>
<td>Environmental Chemistry</td>
</tr>
<tr>
<td>ENVS*3150</td>
<td>0.50</td>
<td>Environmental Microbiology</td>
</tr>
<tr>
<td>ENVS*3160</td>
<td>0.50</td>
<td>Environmental Geology</td>
</tr>
<tr>
<td>ENVS*3170</td>
<td>0.50</td>
<td>Environmental Health</td>
</tr>
</tbody>
</table>

Semester 8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*3180</td>
<td>0.50</td>
<td>Environmental Toxicology</td>
</tr>
<tr>
<td>ENVS*3190</td>
<td>0.50</td>
<td>Environmental Law</td>
</tr>
<tr>
<td>ENVS*3200</td>
<td>0.50</td>
<td>Environmental Policy</td>
</tr>
<tr>
<td>ENVS*3210</td>
<td>0.50</td>
<td>Environmental Economics</td>
</tr>
<tr>
<td>ENVS*3220</td>
<td>0.50</td>
<td>Environmental Management Research</td>
</tr>
<tr>
<td>ENVS*3230</td>
<td>0.50</td>
<td>Environmental Management Practice</td>
</tr>
</tbody>
</table>

Restricted Electives

Students must successfully complete a minimum of 6.00 credits at the 3000 level or higher, of which at least 2.00 credits must be at the 4000 level. Those credits at the 3000 level or above selected to satisfy lists A, B, and C below will be applied to satisfy these minimum credit requirements.

Students should note that some restricted electives require other courses not included among the required courses for the major as prerequisites. Students should consult the most recent undergraduate calendar for specific requirements.

Students should consult with a faculty advisor before Semester 4 in planning their restricted elective choices. Students are advised to pay particular attention to prerequisite requirements when choosing individual courses and seek advice as needed.

1. Students must select a minimum of 6.50 credits from the following lists of restricted electives.

List A

Students must select a minimum of 3.50 credits from any of the following courses without regard to group of which at least 1.00 credits must be at the 4000 level:

Aquatic Science:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3450</td>
<td>0.50</td>
<td>Introduction to Aquatic Environments</td>
</tr>
<tr>
<td>CHEM*3360</td>
<td>0.50</td>
<td>Environmental Chemistry and Toxicology</td>
</tr>
<tr>
<td>EDDR*3450</td>
<td>0.50</td>
<td>Watershed Planning Practice</td>
</tr>
<tr>
<td>ENVS*3220</td>
<td>0.50</td>
<td>Terrestrial Chemistry</td>
</tr>
<tr>
<td>ENVS*3470</td>
<td>0.50</td>
<td>Environmental Organic Chemistry</td>
</tr>
<tr>
<td>GEOG*3610</td>
<td>0.50</td>
<td>Environmental Hydrology</td>
</tr>
</tbody>
</table>

Atmospheric Science:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*2030</td>
<td>0.50</td>
<td>Meteorology and Climatology</td>
</tr>
<tr>
<td>ENVS*2310</td>
<td>0.50</td>
<td>Introduction to Biogeochemistry</td>
</tr>
<tr>
<td>ENVS*3340</td>
<td>0.50</td>
<td>Use and Management of Environmental Data</td>
</tr>
<tr>
<td>ENVS*2110</td>
<td>0.50</td>
<td>Climate and the Biophysical Environment</td>
</tr>
<tr>
<td>BIOL*3060</td>
<td>0.50</td>
<td>Populations, Communities &amp; Ecosystems</td>
</tr>
<tr>
<td>BIOL*3130</td>
<td>0.50</td>
<td>Conservation Biology</td>
</tr>
<tr>
<td>ENVS*2210</td>
<td>0.50</td>
<td>Apiculture and Honey Bee Biology</td>
</tr>
<tr>
<td>ENVS*2330</td>
<td>0.50</td>
<td>Current Issues in Ecosystem Science and Biodiversity</td>
</tr>
<tr>
<td>ENVS*3000</td>
<td>0.50</td>
<td>Nature Interpretation</td>
</tr>
<tr>
<td>ENVS*3010</td>
<td>0.50</td>
<td>Climate Change Biology</td>
</tr>
<tr>
<td>ENVS*3090</td>
<td>0.50</td>
<td>Insect Diversity and Biology</td>
</tr>
<tr>
<td>ENVS*3230</td>
<td>0.50</td>
<td>Agroforestry Systems</td>
</tr>
<tr>
<td>ENVS*3250</td>
<td>0.50</td>
<td>Forest Health and Disease</td>
</tr>
<tr>
<td>ENVS*3270</td>
<td>0.50</td>
<td>Forest Biodiversity</td>
</tr>
<tr>
<td>ENVS*4070</td>
<td>0.50</td>
<td>Pollinator Conservation</td>
</tr>
</tbody>
</table>
ENVS*4230 [0.50] Biology of Aquatic Insects
ENVS*4260 [0.50] Field Entomology
ENVS*4350 [0.50] Forest Ecology
GEOG*3320 [0.50] Food Systems: Issues in Security and Sustainability

Ecosystem and Resource Management:
BIOL*4500 [0.50] Natural Resource Policy Analysis
ENVS*2120 [0.50] Introduction to Environmental Stewardship
ENVS*2240 [0.50] Fundamentals of Environmental Geology
ENVS*3030 [0.50] Conservation Field Course
ENVS*4000 [0.50] Toxicological Risk Assessment
ENVS*4390 [1.00] Soil Variability and Land Evaluation
GEOG*2210 [0.50] Environment and Resources
GEOG*3020 [0.50] Global Environmental Change
GEOG*3110 [0.50] Biotic and Natural Resources
GEOG*3210 [0.50] Management of the Biophysical Environment
GEOG*3420 [0.50] Remote Sensing of the Environment
GEOG*3480 [0.50] GIS and Spatial Analysis
GEOG*4110 [1.00] Environmental Systems Analysis
GEOG*4220 [0.50] Local Environmental Management
GEOG*4320 [0.50] Environmental Impact Assessment

Plant Health:
ENVS*3040 [0.50] Natural Chemicals in the Environment
ENVS*3210 [0.50] Plant Pathology
ENVS*4100 [0.50] Integrated Management of Invasive Insect Pests
ENVS*4180 [0.50] Insecticide Biological Activity and Resistance
ENVS*4190 [0.50] Biological Activity of Herbicides
PBIO*4530 [0.50] Plants and Environmental Pollution

Soil and Nutrient Management:
ENVS*3080 [0.50] Soil and Water Conservation
ENVS*3310 [0.50] Soil Biodiversity and Ecosystem Function
ENVS*4090 [0.50] Soil Management
ENVS*4160 [0.50] Soil and Nutrient Management
ENVS*4320 [1.00] Laboratory and Field Methods in Soil Biodiversity
ENVS*4390 [1.00] Soil Variability and Land Evaluation

List B

Students must select a minimum of 1.50 credits from list B. At least 0.50 credits must be at the 4000 level:

Accounting
ACCT*2230 [0.50] Management Accounting
ACCT*3230 [0.50] Intermediate Management Accounting
ACCT*1240 [0.50] Applied Financial Accounting
ACCT*4230 [0.50] Advanced Management Accounting

Business and Management:
MGMT*3030 [0.50] Corporate Social Responsibility
MGMT*3320 [0.50] Financial Management

Food, Agricultural and Resource Economics:
FARE*2410 [0.50] Agrifood Markets and Policy
FARE*3170 [0.50] Cost-Benefit Analysis
FARE*3310 [0.50] Operations Management
FARE*4290 [0.50] Land Economics
FARE*4310 [0.50] Resource Economics
FARE*4360 [0.50] Marketing Research
FARE*4370 [0.50] Food & Agri Marketing Management

Leadership and Communications:
EDRD*2020 [0.50] Interpersonal Communication
EDRD*3140 [0.50] Organizational Communication
EDRD*3400 [0.50] Sustainable Communities
EDRD*4120 [0.50] Leadership Development in Small Organizations
HROB*2010 [0.50] Foundations of Leadership
HROB*4010 [0.50] Leadership Certificate Capstone

List C

Students may also select any of the following courses as* restricted electives:
AGR*3450 [0.50] Research Methods in Agricultural Science
AGR*3500 [0.50] Experiential Education I
AGR*4450 [1.00] Research Project I
AGR*4460 [1.00] Research Project II
AGR*4600 [1.00] Agriculture and Food Issues Problem Solving
BIOC*2580 [0.50] Introduction to Biochemistry
CHEM*1080 [0.50] General Chemistry II
ECON*1100 [0.50] Introductory Macroeconomics
ENVS*4410 [0.50] Introduction to Advanced Independent Research
ENVS*4420 [0.50] Advanced Independent Research
ENVS*4430 [1.00] Advanced Independent Research
FARE*4550 [0.50] Independent Studies I
FARE*4560 [0.50] Independent Studies II
GEOG*1300 [0.50] Introduction to the Biophysical Environment
GEOG*1350 [0.50] Earth: Hazards and Global Change

* Students considering graduate studies are encouraged to take at least 1.00 of these credits.

Equine Management Major (EQM)

Department of Animal Biosciences and the Department of Food, Agricultural and Resource Economics, Ontario Agricultural College

The major in Equine Management focuses on the development of leaders with a genuine regard for all horses and their well-being, a conscious concern for the environment, and a passionate interest in all aspects of the horse industry. The program combines a solid background in business, biological sciences and equine management through practical and theoretical experience. It provides in-depth understanding of the economic, environmental and social dimensions of all equine disciplines with a broad and current knowledge of horse industry issues and develops the skills to gather, access, interpret and apply industry data. In consultation with the faculty advisor, students can participate in international exchange or semester abroad opportunities in semester 6. Students can also incorporate a variety of field trips, experiential learning in the workplace and independent research projects into their program.

This major will require the completion of 20.00 credits: 14.00 from required courses, 5.00 from restricted electives and 1.00 electives. Of these credits, a minimum of 6.00 credits are required at the 3000-level or higher, of which at least 2.00 credits must be at the 4000-level.

Semester 1 - Fall

BIOL*1050 [0.50] Biology of Plants & Animals in Managed Ecosystems
BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
ECON*1050 [0.50] Introductory Microeconomics
EQN*1010 [1.00] Introduction to Equine Management

Semester 2 - Winter

ACCT*1220 [0.50] Introductory Financial Accounting
ANSC*1210 [1.00] Principles of Animal Care and Welfare
EQN*2040 [0.50] Equine Anatomy and Physiology

One of:
CHEM*1040 [0.50] General Chemistry I
CHEM*1100 [0.50] Chemistry Today

Semester 3 - Fall

ACCT*2230 [0.50] Management Accounting
ENVS*2060 [0.50] Soil Science
EQN*2060 [0.50] Equine Event Management I
EQN*2200 [0.50] Equine Industry Trends and Issues I

0.50 electives or restricted electives

Semester 4 - Winter

EQN*2040 [0.50] Equine Anatomy and Physiology
ENVS*2060 [0.50] Soil Science
ECON*1050 [0.50] Introductory Microeconomics

Semester 5 - Fall

ANSC*3080 [0.50] Agricultural Animal Physiology
CROP*3340 [0.50] Managed Grasslands
EQN*3070 [0.50] Equine Health Management
STAT*2060 [0.50] Statistics for Business Decisions

1.00 electives or restricted electives

Semester 6 - Winter

EQN*3050 [0.50] Equine Exercise Physiology
EQN*3150 [0.50] Equine Exercise Physiology Laboratory

1.50 electives or restricted electives

Semester 7 - Fall

EQN*4400 [0.50] Equine Industry Trends and Issues II
EQN*4500 [1.00] Equine Integrated Project

1.00 electives or restricted electives

Semester 8 - Winter

EQN*3060 [0.50] Equine Reproduction
EQN*4020 [0.50] Advanced Equine Nutrition

1.50 electives or restricted electives

Restricted Electives

Students must successfully complete a minimum of 6.00 credits at the 3000 level or higher, of which at least 2.00 credits must be at the 4000 level.

Students must select a minimum of 5.00 credits from the following four lists of restricted electives.

Students should note that some restricted electives require other courses not included among the required courses for the major as prerequisites. Students should consult the most recent undergraduate calendar for specific requirements.
1. Students must select a minimum of 1.50 credits from any of the following lists (grouped by topic areas):

**Animal Biology:**
- AGR*2350 [0.50] Animal Production Systems, Health and Industry
- ANSC*4090 [0.50] Applied Animal Behaviour
- ANSC*4100 [0.50] Applied Environmental Physiology and Animal Housing
- ANSC*4490 [0.50] Applied Endocrinology
- ANSC*4650 [0.50] Comparative Immunology
- POPM*4230 [0.50] Animal Health

**Genetics:**
- MBG*2400 [0.50] Fundamentals of Plant and Animal Genetics
- MBG*3060 [0.50] Quantitative Genetics
- MBG*4020 [0.50] Genetics of Companion Animals
- MBG*4030 [0.50] Animal Breeding Methods and Applications

**Pasture and Turf Management:**
- ENVS*3080 [0.50] Soil and Water Conservation
- ENVS*3140 [0.50] Management of Turfgrass Diseases

One of:
- ENVS*4090 [0.50] Soil Management
- ENVS*4160 [0.50] Soil and Nutrient Management
- HORT*2450 [0.50] Introduction to Turfgrass Science
- HORT*3050 [0.50] Management of Turfgrass Insect Pests and Weeds
- HORT*4450 [0.50] Advanced Turfgrass Science

**Advanced Nutrition:**
- BIOC*2580 [0.50] Introduction to Biochemistry
- CHEM*1050 [0.50] General Chemistry II
- NUTR*3210 [0.50] Fundamentals of Nutrition

2. Students must select a minimum of 1.50 credits from any of the following lists (grouped by topic areas):

**Accounting:**
- ACCT*3230 [0.50] Intermediate Management Accounting
- ACCT*4230 [0.50] Advanced Management Accounting

**Business and Management:**
- HROB*2010 [0.50] Foundations of Leadership
- HROB*2090 [0.50] Individuals and Groups in Organizations
- HROB*4010 [0.50] Leadership Certificate Capstone
- MGMT*2150 [0.50] Introduction to Canadian Business Management
- MGMT*3020 [0.50] Corporate Social Responsibility
- MGMT*3320 [0.50] Financial Management

**Food, Agricultural and Resource Economics:**
- FARE*2700 [0.50] Survey of Natural Resource Economics
- FARE*3310 [0.50] Operations Management
- FARE*3170 [0.50] Cost-Benefit Analysis
- FARE*4220 [0.50] Advanced Agribusiness Management
- FARE*4360 [0.50] Marketing Research
- FARE*4370 [0.50] Food & Agri Marketing Management
- FARE*4290 [0.50] Land Economics
- FARE*4550 [0.50] Independent Studies I

**Marketing:**
- MCS*1000 [0.50] Introductory Marketing
- MCS*2020 [0.50] Information Management
- MCS*2600 [0.50] Fundamentals of Consumer Behaviour
- MCS*3000 [0.50] Advanced Marketing
- MCS*3040 [0.50] Business and Consumer Law
- MCS*3620 [0.50] Marketing Communications

3. Students must select a minimum of 1.00 credits from:

- AGR*3010 [0.50] Special Studies in Agricultural Science I
- AGR*4010 [0.50] Special Studies in Agricultural Science II
- AGR*4600 [1.00] Agriculture and Food Issues Problem Solving
- AGR*4450 [1.00] Research Project I
- AGR*4460 [1.00] Research Project II
- ANSC*4610 [0.50] Critical Analysis in Animal Science

4. Students may also count any of the following courses as restricted electives:

- AGR*3500 [0.50] Experiential Education I
- ECON*1100 [0.50] Introductory Macroeconomics
- EDRD*2020 [0.50] Interpersonal Communication
- EDRD*3050 [0.50] Agricultural Communication I
- EDRD*3140 [0.50] Organizational Communication
- EDRD*3400 [0.50] Sustainable Communities
- EDRD*4120 [0.50] Leadership Development in Small Organizations
- EQN*2500 [0.50] Equine Field Course
- PSYC*1000 [0.50] Introduction to Psychology

**Food Industry Management (FIM)**

This major focuses on the development of leaders in the areas of Food Industry Innovation and Operations. The program combines a solid background in food science, economics and business, using a mix of theoretical and applied study. Students in this major will be able to create a curriculum uniquely tailored to their career goals. The flexibility provided in semesters 5 through 8 enables students to develop their understanding of specific areas of food science and business. Student participation in international exchanges and international summer research programs is encouraged and supported through academic advising on course selection and substitution. Students have the opportunity to incorporate a variety of field trips, experiential learning in the workplace and independent research projects into their program. The combination of a solid understanding of food science and current business practice with specialized skills and experience provided by this program is unique and greatly valued by prospective employers in this important sector of the Canadian and global economies.

This major will require the completion of 20.00 credits: 14.50 credits of required courses, 3.00 credits from restricted electives, and 2.50 credits of free electives. Of these credits, a minimum of 6.00 credits are required at the 3000 level or higher, of which at least 3.00 credits must be at the 4000 level.

**Semester 1**
- ACCT*1220 [0.50] Introductory Financial Accounting
- BIOL*1080 [0.50] Biological Concepts of Health
- CHEM*1040 [0.50] General Chemistry I
- HROB*2090 [0.50] Individuals and Groups in Organizations
- MATH*1030 [0.50] Business Mathematics

**Semester 2**
- BIO*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1050 [0.50] General Chemistry II
- FARE*1400 [1.00] Economics of the Agri-Food System
- 0.50 electives

**Semester 3**
- BIO*2580 [0.50] Introduction to Biochemistry
- FOOD*2150 [0.50] Introduction to Nutritional and Food Science
- MCS*2020 [0.50] Information Management
- MCR*2420 [0.50] Introduction to Microbiology
- STAT*2060 [0.50] Statistics for Business Decisions

**Semester 4**
- ACCT*2230 [0.50] Management Accounting
- ECON*1100 [0.50] Introductory Macroeconomics
- FOOD*2100 [0.50] Communication in Food Science
- FOOD*2620 [0.50] Food Engineering Principles
- 0.50 electives or restricted electives

**Semester 5**
- FARE*3310 [0.50] Operations Management
- FOOD*3140 [0.50] Food Processing I
- FOOD*3240 [0.50] Food Microbiology
- 1.00 electives or restricted electives

**Semester 6**
- FOOD*3170 [0.50] Food Processing II
- HROB*2010 [0.50] Foundations of Leadership
- PHIIL*2120 [0.50] Ethics
- PHIIL*2600 [0.50] Business and Professional Ethics
- 1.00 electives or restricted electives

**Semester 7**
- FARE*3320 [0.50] Supply and Value Chain Management
- FARE*4370 [0.50] Food & Agri Marketing Management
- 1.50 electives or restricted electives

**Semester 8**
- FARE*4330 [0.50] Advanced Operations Management
- FARE*4380 [0.50] Retailing, Merchandising and Sales
- FOOD*4310 [0.50] Food Safety Management Systems
- 1.00 electives or restricted electives

**Restricted Electives**

Students should note that some restricted electives require other courses not included among the required courses for the major as prerequisites. Students should consult the most recent undergraduate calendar for specific requirements. Students must take a minimum of 3.00 credits from restricted electives.

A minimum of 1.00 credits from the following list:
- FOOD*4070 [0.50] Food Packaging
- FOOD*4110 [0.50] Meat and Poultry Processing
- FOOD*4400 [0.50] Dairy Processing
- FOOD*4520 [0.50] Utilization of Cereal Grains for Human Food

A minimum of 1.00 credits from the following list:
- FARE*3000 [0.50] Food Industry Analysis and Policy
FARE*3170 [0.50] Cost-Benefit Analysis
FARE*4360 [0.50] Marketing Research
FARE*4500 [0.50] Decision Science
FOOD*4020 [0.50] Quality Management in the Food Industry
POLS*3347 [0.50] Business-Government Relations in Canada

Students may also count any of the courses from the following list as restricted electives:

- FOOD*3050 [0.50] Food Chemistry I
- FOOD*3700 [0.50] Sensory Evaluation of Foods
- FOOD*4090 [0.50] Functional Foods and Nutraceuticals
- FOOD*4260 [0.50] Food Product Development I
- FOOD*4270 [0.50] Food Product Development II

Students may also count any of the research/ experiential learning/ independent study courses from the following list as restricted electives:

- AGR*3010 [0.50] Special Studies in Agricultural Science I
- AGR*3500 [0.50] Experiential Education I
- FARE*4550 [0.50] Independent Studies I
- FARE*4560 [0.50] Independent Studies II
- FOOD*4220 [0.50] Topics in Food Science
- FOOD*4230 [0.50] Research in Food Science

**Food Industry Management (Co-op) (FIM:C)**

Department of Food, Agricultural and Resource Economics and Department of Food Science, Ontario Agricultural College

This major focuses on the development of leaders in the areas of Food Industry Innovation and Operations. The program combines a solid background in food science, economics and business, using a mix of theoretical and applied study. Students in this major will be able to create a curriculum uniquely tailored to their career goals. The flexibility provided in semesters 5 through 8 enables students to develop their understanding of specific areas of food science and business. Student participation in international exchanges and international summer research programs is encouraged and supported through academic advising on course selection and substitution. Students have the opportunity to incorporate a variety of field trips, experiential learning in the workplace and independent research projects into their program. The combination of a solid understanding of food science and current business practice with specialized skills and experience provided by this program is unique and greatly valued by prospective employers in this important sector of the Canadian and global economies.

A principal aim of the Co-op program in Food Industry Management is to facilitate the transition of students from academic studies to a professional career by enhancing the integration of theory and practice.

**Program Requirements**

The Co-op program in Food Industry Management is a five year program, including 4 work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Students are eligible to participate in a maximum two (2) summer employment processes and must follow the academic work schedule as outlined on the Co-operative Education website: https://www.recruitguelph.ca/cecs/.

**Food Industry Management Academic and Co-op Work Term Schedule**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>Academic Semester 4</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5</td>
<td>Academic Semester 6</td>
<td>COOP*2000 Work Term II</td>
</tr>
<tr>
<td>4</td>
<td>COOP*3000 Work Term III</td>
<td>COOP*4000 Work Term IV</td>
<td>Off</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, they must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading and work term report grading.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

**Credit Summary (21.50 Total Credits)**

- 14.50 - Required Core Courses
- 3.00 - Restricted Electives
- 2.50 - Free Electives
- 1.50 - Co-op Work Terms

Students should note that a minimum of 6.00 credits of their BBRM degree are required at the 3000 level or higher, of which at least 3.00 credits must be at the 4000 level.

**Note:** A minimum of three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fourth work term is optional and if completed the total number of credits will equal 22.00.

**Semester 1 - Fall**

- ACCT*1110 [0.50] Introductory Financial Accounting
- BIOL*1080 [0.50] Biological Concepts of Health
- CHEM*1040 [0.50] General Chemistry I
- HROB*2090 [0.50] Individuals and Groups in Organizations
- MATH*1030 [0.50] Business Mathematics

**Semester 2 - Winter**

- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1050 [0.50] General Chemistry II
- FARE*1400 [1.00] Economics of the Agri-Food System

**Summer Semester**

- Off

**Semester 3 - Fall**

- BIOL*2580 [0.50] Introduction to Biochemistry
- COOP*1100 [0.00] Introduction to Co-operative Education
- FOOD*2150 [0.50] Introduction to Nutritional and Food Science
- MCS*2020 [0.50] Information Management
- MICR*2420 [0.50] Introduction to Microbiology
- STAT*2060 [0.50] Statistics for Business Decisions

**Semester 4 - Winter**

- ACCT*2230 [0.50] Management Accounting
- ECON*1100 [0.50] Introductory Macroeconomics
- FOOD*2100 [0.50] Communication in Food Science
- FOOD*2620 [0.50] Food Engineering Principles

**Summer Semester**

- Off

**Semester 5 - Fall**

- FARE*3310 [0.50] Operations Management
- FOOD*3140 [0.50] Food Processing I
- FOOD*3240 [0.50] Food Microbiology

**Summer Semester**

- Off

**Semester 6 - Winter**

- FOOD*3170 [0.50] Food Processing II
- HROB*2010 [0.50] Foundations of Leadership
- One of:
  - PHIL*2120 [0.50] Ethics
  - PHIL*2600 [0.50] Business and Professional Ethics

**Summer Semester**

- COOP*2000 [0.50] Co-op Work Term II

**Fall Semester**

- COOP*3000 [0.50] Co-op Work Term III

**Winter Semester**

- COOP*4000 [0.50] Co-op Work Term IV

**Summer Semester**

- Off

**Semester 7 - Fall**

- FARE*3320 [0.50] Supply and Value Chain Management
- FARE*4370 [0.50] Food & Agri Marketing Management

**Summer Semester**

- 1.50 electives or restricted electives

**Semester 8 - Winter**

- FARE*4330 [0.50] Advanced Operations Management
- FARE*4380 [0.50] Retailing, Merchandising and Sales
- FOOD*4310 [0.50] Food Safety Management Systems

**Summer Semester**

- 1.00 electives or restricted electives

**Restricted Electives**

Students should note that some restricted electives require other courses not included among the required courses for the major as prerequisites. Students should consult the most recent undergraduate calendar for specific requirements. Students must take a minimum of 3.00 credits from restricted electives.

A minimum of 1.00 credits from the following list:

- FOOD*4070 [0.50] Food Packaging
- FOOD*4110 [0.50] Meat and Poultry Processing
- FOOD*4400 [0.50] Dairy Processing
- FOOD*4520 [0.50] Utilization of Cereal Grains for Human Food
A minimum of 1.00 credits from the following list:

- FARE*3000 [0.50] Food Industry Analysis and Policy
- FARE*3170 [0.50] Cost-Benefit Analysis
- FARE*4360 [0.50] Marketing Research
- FARE*4500 [0.50] Decision Science
- FOOD*4020 [0.50] Quality Management in the Food Industry
- POLS*3470 [0.50] Business-Government Relations in Canada

Students may also count any of the courses from the following list as restricted electives:

- FOOD*3050 [0.50] Food Chemistry I
- FOOD*3700 [0.50] Sensory Evaluation of Foods
- FOOD*4090 [0.50] Functional Foods and Nutraceuticals
- FOOD*4260 [0.50] Food Product Development I
- FOOD*4270 [0.50] Food Product Development II

Students may also count any of the research/experiential learning/independent study courses from the following list as restricted electives:

- AGR*3010 [0.50] Special Studies in Agricultural Science I
- AGR*3500 [0.50] Experiential Education I
- FARE*4550 [0.50] Independent Studies I
- FARE*4560 [0.50] Independent Studies II
- FOOD*4220 [0.50] Topics in Food Science
- FOOD*4230 [0.50] Research in Food Science
Bachelor of Commerce (B.Comm.)

The University of Guelph offers an eight semester (20.00 credits) honours program leading to a Bachelor of Commerce degree (B.Comm.). The normal course load is 2.50 credits per semester for a full-time student. The program is of an interdisciplinary nature and designed to give students a sound professional management education with a focus on specific industry sectors or management functions which prepare the graduates for positions of responsibility in particular areas of management and business.

Elective options enable students to select courses which support or complement their primary field of study.

In their first semester, students may be admitted to one of eight specialized majors or enter as “undeclared”. Students in the undeclared first year, must declare a specialized major by the end of semester two in order to gain access to required courses in semester three.

Bachelor of Commerce Majors

All majors in the Bachelor of Commerce program are also available in the Co-operative Education (Co-op) option. Co-operative Education is not available in Undeclared.

Undeclared (only available in semesters one and two)

| Accounting |
| Management |
| Management Economics and Finance |
| Marketing Management |
| Public Management |
| Real Estate and Housing |

In addition to specializing in a major area of study, the B.Comm. core ensures that each major also provides a comprehensive commerce education to all students in the program.

The B.Comm. Core includes:

Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT*1220</td>
<td>0.50</td>
</tr>
<tr>
<td>ECON*1050</td>
<td>0.50</td>
</tr>
<tr>
<td>ECON*1100</td>
<td>0.50</td>
</tr>
<tr>
<td>MATH*1030</td>
<td>0.50</td>
</tr>
<tr>
<td>MCS*1000</td>
<td>0.50</td>
</tr>
<tr>
<td>MGMT*1000</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Introduction to Financial Accounting
Introduction to Microeconomics
Introduction to Macroeconomics
Business Mathematics
Introductory Marketing
Introduction to Business

Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT*2230</td>
<td>0.50</td>
</tr>
<tr>
<td>ECON*2560</td>
<td>0.50</td>
</tr>
<tr>
<td>HROB*2090</td>
<td>0.50</td>
</tr>
<tr>
<td>MCS*2020</td>
<td>0.50</td>
</tr>
<tr>
<td>MGMT*1100</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Management Accounting
Introduction to Finance
Individuals and Groups in Organizations
Information Management
Business Career Preparation

Year 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT*3020</td>
<td>0.50</td>
</tr>
<tr>
<td>MGMT*3320</td>
<td>0.50</td>
</tr>
<tr>
<td>MGMT*4000</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Corporate Social Responsibility
Financial Management
Strategic Management

* MGMT*1100 is part of the Career Development Program which is designed to provide students with knowledge and tools to enhance their career readiness skills.

Students who have successfully completed COOP*1100 will be exempted from MGMT*1100.

The following core areas are covered through a choice of courses as determined by your major:

- **Law**
  - HROB*3050, MCS*3040, REAL*4840
- **Operations**
  - FARE*3310, HTM*3120
- **Statistics**
  - ECON*2740, PSYC*1010, STAT*2060

Liberal Education Requirement

Other requirements are accommodated by specialized courses within the major or through specific courses chosen by the major from those available on campus.

Program Information

Academic Counselling

Program Counselling

Students are urged to seek the assistance of the counsellors in the B.Comm. Counselling Office regarding their program and academic regulations, course selection issues, services and resources, and when they are experiencing difficulties that affect their academic progress.

Departmental Advising

On entering the program, all students are assigned to a departmental Faculty Advisor by major. Students should seek the advice of the Faculty Advisor when they have questions or concerns about courses and academic requirements for their program/major. The Faculty Advisor is also knowledgeable about career opportunities which relate to a student’s specific major. The list of Faculty Advisors is available on the Undergraduate Academic Information Centre website: [http://www.uoguelph.ca/uaic/students_advisors.shtml](http://www.uoguelph.ca/uaic/students_advisors.shtml) or contact the B.Comm. Counselling Office for further information.

Special Expenses

Expenses may include cost of field trips and supplies and, for some majors, laboratory coats and other protective clothing.

Study at Other Universities

Students contemplating study at another university for credit towards a Bachelor of Commerce degree at the University of Guelph should refer to the general regulations governing Letters of Permission in Section VII Degree and Regulations and Procedures in this calendar.

Students must obtain approval for the Letter of Permission prior to undertaking studies at another institution. Approval of the request depends on good standing in the program with a minimum cumulative average of 60%.

The total limit of credits taken on a Letter of Permission is 2.50 based on the University of Guelph’s credit system.

Study Abroad

Global understanding and perspectives are regarded as being of central importance among the university's learning objectives, as they are, also, in understanding the international business environment. On both of these accounts, students enrolled in the B.Comm. program are urged to participate in one of the several exchange and study abroad programs specifically designed for the Commerce program. Planning for such participation is best undertaken quite early in the course of studies. For more specific information on possible opportunities refer to Section V -- International Study of the calendar or contact the B.Comm. program counsellor.

Continuation of Studies

Students are advised to consult the regulations for Continuation of Study within the program which are outlined in detail in Section VIII -- Undergraduate Degree Regulations and Procedures.

Conditions of Graduation

To qualify for a Bachelor of Commerce degree, the student must satisfy the following conditions:

- The student must successfully complete 1.50 credits from the Liberal Education Requirement list.
- The student must successfully complete a minimum of 20.00 approved credits, in accordance with the Schedule of Studies for the specified major, including the Liberal Education Requirement.
- The student must successfully pass Business Career Preparation [MGMT*1100] or Introduction to Co-operative Education [COOP*1100]
- Students will not be eligible to graduate while on probationary or required-to-withdraw status.

Career Development Program

The Career Development Program provides students with knowledge and tools to enhance their career readiness skills, leading to a greater level of confidence and success when approaching the career search process. Through a series of activities that would span over each year of the Bachelor of Commerce Program, including a mandatory Business Career Preparation Course [MGMT*1100]*, students will be guided through a framework for career management and steps to create a personal “career toolkit”.

*Students who have successfully completed [COOP*1100] will be exempted from [MGMT*1100]

Liberal Education Requirement

The Liberal Education Requirement is designed to provide the student with exposure to and some understanding of a range of disciplines in the Arts, Humanities, Social Sciences, and Mathematical and Natural Sciences.

The Liberal Education Requirement consists of 1.50 credits. The course prefixes listed below cannot be used to satisfy the Liberal Education Requirement:

- ACCT Accounting
- BUS Business
- ECON Economics
- FARE Food, Agricultural and Resource Economics
- HROB Human Resources and Organizational Behaviour
- HTM Hospitality and Tourism Management
- MGMT Management
- MCS Marketing and Consumer Studies
REAL Real Estate and Housing

Free Electives
Free Electives allow students to select courses that support or complement their primary field of study. Students may select undergraduate courses from any department, including Commerce/Business related courses, provided any individual course restrictions and prerequisites are satisfied. These courses can be at any year level.

The total number of Free Electives allowed varies by major (refer to the Schedule of Studies for details). Free Electives cannot be used to fulfill Required Core courses. Restricted Electives or Liberal Education Electives, but they could contribute to the total number of credits required for graduation.

Honours Minor
A minor is a group of courses which provide exposure to and mastery of the fundamental principles of a subject. A minor consists of a minimum of 5.00 credits (normally 10 courses). It may also require certain other courses from other areas to be taken along with the specified courses of the minor. A minor is taken in conjunction with a major. Students cannot earn a minor in the same subject area as their major. Additionally, students in the BComm program are not permitted to earn a minor in Business or Business Economics. For a list of Minors, please see Specializations and Their Degrees.

Given the professional and applied nature of the B.Comm program, there are no double majors associated with the degree.

Double Counting of Credits
A maximum of 2.50 credits required in a major program may be applied to meet the requirements of a minor. Courses used to meet the Liberal Education requirement may not double-count toward the requirements of their major but may double-count towards the completion of a minor.

Schedule of Studies
Courses specified in the schedule of studies are required courses and must be completed successfully. A full course load normally involves 2.50 credits per semester. Part-time study is also possible although students should discuss this option with their Program Counselor or Faculty Advisor.

Undeclared (UND)
Gordon S. Lang School of Business and Economics
Applicants to the B.Comm program who want a flexible introduction to business studies should consider entering as an unspecialized student. Students must declare one of the eight majors in order to gain access to required courses. This must be done no later than the end of semester two.

Liberal Education Requirement
As part of the graduation requirement all students within the B.Comm Program are required to complete 1.50 credits from at least two different subject prefixes as listed under the B.Comm. Program Information section of the undergraduate calendar.

Major

Semester 1
ECON*1050 [0.50] Introductory Microeconomics
MATH*1030 [0.50] Business Mathematics
MGMT*1000 [1.00] Introduction to Business

One of:
HTM*1070 [0.50] Responsible Tourism Policy and Planning *
HTM*1700 [0.50] Foodservice Management *
MATH*1200 [0.50] Calculus I *
POLIS*1400 [0.50] Issues in Canadian Politics *
PSYC*1000 [0.50] Introduction to Psychology
REAL*1820 [0.50] Real Estate and Housing *
0.50 elective

* These courses are offered in the Fall semester only

Semester 2
ACCT*1220 [0.50] Introductory Financial Accounting
ECON*1100 [0.50] Introductory Macroeconomics
HGRO*2090 [0.50] Individuals and Groups in Organizations
MCS*1000 [0.50] Introductory Marketing
0.50 electives

Notes:
1. Students interested in choosing the ACCT major should take ACCT*1220 during the Fall semester instead of the 0.50 elective. ACCT*1240 Applied Financial Accounting will then be taken in the Winter semester.
2. Students interested in choosing the FAB Major should take FARE*1400 Economics of the Agri-Food System instead of HGRO*2090 and the 0.50 electives during the Winter Semester.
3. Students interested in choosing the MGMT major should take MGMT*1200 Principles of Management instead of ACCT*1220 in the Winter semester.
4. Students who select MATH*1200 do not also need to complete MATH*1030.

Students leaning towards a certain major may use their electives to take courses in that area. Undeclared students are encouraged to meet with a B.Comm. program counsellor for advice on elective selection. Further information on selecting electives for the Undeclared first year can be found on the B.Comm. Program Counselling Office website:
https://www.uoguelph.ca/business/bcomm

Accounting (ACCT)
Department of Management, Gordon S. Lang School of Business and Economics
By combining the conceptual and quantitative elements of accounting while promoting the integration of theory and practice, the accounting major provides graduates with the academic requirements for the postgraduate pursuit of a Professional Accounting designation. Students will develop the technical, analytical, evaluative and communication skills needed for a successful career in accounting and related management areas.

The program provides a strong foundation of accounting and general business knowledge while allowing significant opportunity to develop breadth and depth of knowledge in related areas of study.

Students pursuing a professional accounting designation should visit the Department of Management website for links to the requirements.

Elective options enable students to select courses which support or complement their primary field of study.

Degree Requirements (20.00 Total Credits)
13.00 - Required Core Courses
1.00 - Restricted Electives (see semester 7 & 8)
0.00 – MGMT*1100 (Business Career Preparation)
1.50 - Liberal Education Electives
4.50 - Free Electives

The recommended program sequence is outlined below.

Major

Semester 1
ACCT*1220 [0.50] Introductory Financial Accounting
ECON*1050 [0.50] Introductory Microeconomics
MATH*1030 [0.50] Business Mathematics
MGMT*1000 [1.00] Introduction to Business

Semester 2
ACCT*1240 [0.50] Applied Financial Accounting
ECON*1100 [0.50] Introductory Macroeconomics
HGRO*2090 [0.50] Individuals and Groups in Organizations
MCS*1000 [0.50] Introductory Marketing

0.50 electives

Semester 3
ACCT*2230 [0.50] Management Accounting
MCS*2020 [0.50] Information Management
MGMT*1100 [0.00] Business Career Preparation
STAT*2060 [0.50] Statistics for Business Decisions

1.00 electives

Semester 4
ACCT*3330 [0.50] Intermediate Financial Accounting I
ECON*2560 [0.50] Introduction to Finance
MCS*3040 [0.50] Business and Consumer Law
MGMT*3320 [0.50] Financial Management

0.50 electives

Semester 5
ACCT*3280 [0.50] Auditing I
ACCT*3340 [0.50] Intermediate Financial Accounting II
ACCT*3350 [0.50] Taxation
HGRO*2290 [0.50] Human Resources Management

0.50 electives

Semester 6
ACCT*3230 [0.50] Intermediate Management Accounting
FARE*3310 [0.50] Operations Management
MGMT*3020 [0.50] Corporate Social Responsibility
1.00 electives

Semester 7 - Fall
ACCT*4220 [0.50] Advanced Financial Accounting

Semester 8 - Winter
ACCT*4230 [0.50] Advanced Management Accounting

Semester 7 or 8 - Fall or Winter
MGMT*4000 [0.50] Strategic Management
Two of:
ACCT*4270 [0.50] Auditing II
ACCT*4290 [0.50] IT Auditing and Data Analytics
ACCT*4340 [0.50] Accounting Theory

2019-2020 Undergraduate Calendar

Last Revision: July 4, 2019
Accounting (Co-op) (ACCT:C)

Department of Management, Gordon S. Lang School of Business and Economics

By combining the conceptual and quantitative elements of accounting while promoting the integration of theory and practice, the accounting major provides graduates with the academic requirements for the postgraduate pursuit of a Professional Accounting designation. Students will develop the technical, analytical, evaluative and communication skills needed for a successful career in accounting and related management areas.

The program provides a strong foundation of accounting and general business knowledge while allowing significant opportunity to develop breadth and depth of knowledge in related areas of study.

Students pursuing a professional accounting designation should visit the Department of Management website for links to the requirements.

Elective options enable students to select courses which support or complement their primary field of study.

The Co-op program in Accounting is designed to facilitate the transition of students from academic studies to a professional career by enhancing the integration of theory and practice.

Program Requirements

The Co-op program in Accounting is a five year program including four work terms. Students must complete a Fall and Winter work term, and must follow the academic work schedule (also found on the Co-operative Education website: https://www.recruitregalphy.cs/occs). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Accounting and Co-op Work Term Schedule

Year | Fall | Winter | Summer
--- | --- | --- | ---
1 | Academic Semester 1 | Academic Semester 2 | Off
| ACCT*1100 | COOP*1000 |
2 | Academic Semester 3 | COOP*1000 Work Term I | Academic Semester 4
| COOP*2000 Work Term II | |
3 | Academic Semester 5 | COOP*3000 Work Term III | Academic Semester 6
| COOP*4000 Work Term IV | |
4 | Academic Semester 7 | Academic Semester 8 | N/A

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (21.50 Total Credits)

13.00 - Required Core Courses
1.00 - Restricted Electives (see semester 7 & 8)
1.50 - Liberal Education Electives
4.50 - Free Electives
1.50 – Co-op work terms

Note: A minimum of three Co-op work terms including a Fall and Winter are necessary to complete the Co-op requirement. *A fourth Co-op work term is optional and if completed, the total number of credits will equal 22.00

The recommended program sequence is outlined below.

Major

Semester 1 - Fall
- ACCT*1220 [0.50] Introductory Financial Accounting
- ECON*1050 [0.50] Introductory Microeconomics
- MATH*1030 [0.50] Business Mathematics
- MGMT*1000 [1.00] Introduction to Business

Semester 2 - Winter
- ACCT*1240 [0.50] Applied Financial Accounting
- COOP*1100 [0.00] Introduction to Co-operative Education
- ECON*1100 [0.50] Introductory Macroeconomics
- HRDB*2090 [0.50] Individuals and Groups in Organizations
- 1.00 electives

Semester 3 - Fall
- ACCT*2230 [0.50] Management Accounting
- ACCT*3330 [0.50] Intermediate Financial Accounting I
- MCS*1000 [0.50] Introductory Marketing
- STAT*2060 [0.50] Statistics for Business Decisions
- 0.50 electives

Winter Semester
- COOP*1000 [0.50] Co-op Work Term I

Semester 4 - Summer
- ACCT*3280 [0.50] Auditing I
- ACCT*3340 [0.50] Intermediate Financial Accounting II
- ACCT*3350 [0.50] Taxation
- MGMT*2020 [0.50] Information Management
- 0.50 electives

Semester 5 - Fall
- ECON*2560 [0.50] Introduction to Finance
- FARE*3310 [0.50] Operations Management
- HROB*2290 [0.50] Human Resources Management
- 1.00 electives

Winter Semester
- COOP*2000 [0.50] Co-op Work Term II

Semester 6 - Summer
- ACCT*3230 [0.50] Intermediate Management Accounting
- MCS*3040 [0.50] Business and Consumer Law
- MGMT*3020 [0.50] Corporate Social Responsibility
- MGMT*3320 [0.50] Financial Management
- 0.50 electives

Fall Semester
- COOP*3000 [0.50] Co-op Work Term III
- (Eight month work term in conjunction with COOP*4000)

Winter Semester
- COOP*4000 [0.50] Co-op Work Term IV
- (Eight month work term in conjunction with COOP*3000)

Semester 7 - Fall
- ACCT*4220 [0.50] Advanced Financial Accounting

Semester 8 - Winter
- ACCT*4230 [0.50] Advanced Management Accounting

Semester 7 or 8 - Fall or Winter
- MGMT*4000 [0.50] Strategic Management
- Two of:
  - ACCT*4270 [0.50] Auditing II
  - ACCT*4290 [0.50] IT Auditing and Data Analytics
  - ACCT*4340 [0.50] Accounting Theory
  - ACCT*4350 [0.50] Income Taxation II
  - ACCT*4440 [0.50] Integrated Cases in Accounting
- 2.50 electives

Note: ACCT*4270 and ACCT*4350 are offered in the Fall only. ACCT*4290, ACCT*4340 and ACCT*4440 are offered in the Winter only. Students may take MGMT*4000 in either Fall or Winter.

Food and Agricultural Business (FAB)

Department of Food, Agricultural and Resource Economics, Ontario Agricultural College

In this major, students will acquire the management education needed to succeed in the dynamic and innovative food and agribusiness industries. Building on an understanding of economic theory and applied methods in both the Canadian and the global context, the program prepares graduates with technical, entrepreneurial and leadership skills for a variety of professional opportunities in industry, government agencies and non-governmental organizations. The major provides a complete foundation for further studies leading to a graduate degree or professional accounting designation.

The major is administered by the Department of Food, Agricultural and Resource Economics in the Ontario Agricultural College and students are urged to consult the faculty advisor.

Degree Requirements (20.00 Total Credits)

15.50 - Required Core Courses
1.00 - Restricted Electives (from lists)
0.00 – MGMT*1100 (Business Career Preparation)
1.50 - Liberal Education Electives
2.00 - Free Electives

Major

Semester 1
- ECON*1050 [0.50] Introductory Microeconomics

Last Revision: July 4, 2019
The major is administered by the Department of Food, Agricultural and Resource Economics in the Ontario Agricultural College and students are urged to consult the faculty advisor.

Program Requirements
The Co-op program in Food and Agricultural Business is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Food and Agricultural Business Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>Academic Semester 4</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>COOP*4000 Work Term IV</td>
<td>COOP*5000 Work Term V</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (22.00 Total Credits)*
15.50 - Required Core Courses
1.00 - Restricted Electives (from lists)
1.50 - Liberal Education Electives
2.00 – Free Electives
2.00 Co-op Work Terms

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed the total number of credits will equal 22.50.

The recommended program sequence is outlined below.

Major

Semester 1 - Fall
ECON*1050 [0.50] Introductory Microeconomics
MATH*1030 [0.50] Business Mathematics
MCS*1000 [0.50] Introductory Marketing
MGMT*1000 [1.00] Introduction to Business

Semester 2 - Winter
ACCT*1220 [0.50] Introductory Financial Accounting
ECON*1100 [0.50] Introductory Macroeconomics
FARE*1400 [1.00] Economics of the Agri-Food System
0.50 electives or restricted electives

Semester 3
ECON*2310 [0.50] Intermediate Microeconomics
ECON*2740 [0.50] Economic Statistics
HROB*2090 [0.50] Individuals and Groups in Organizations
MCS*2020 [0.50] Information Management
MGMT*1100 [0.00] Business Career Preparation
0.50 electives or restricted electives

Semester 4
ACCT*2230 [0.50] Management Accounting
ECON*2410 [0.50] Intermediate Macroeconomics
ECON*2770 [0.50] Introductory Mathematical Economics
FARE*2410 [0.50] Agri-food Markets and Policy
0.50 electives or restricted electives

Semester 5
ECON*2560 [0.50] Introduction to Finance
ECON*3740 [0.50] Introduction to Econometrics
FARE*3310 [0.50] Operations Management
FARE*3320 [0.50] Financial Management

Semester 6
FARE*4240 [0.50] Futures and Options Markets
2.00 electives or restricted electives

Semester 7
FARE*4370 [0.50] The Firm and Markets
FARE*4470 [0.50] Food & Agri Marketing Management
MGMT*4000 [0.50] Strategic Management
Out of:
HROB*3050 [0.50] Employment Law
MCS*3040 [0.50] Business and Consumer Law
REAL*4840 [0.50] Housing and Real Estate Law
0.50 electives or restricted electives

Semester 8
AGR*4600 [1.00] Agriculture and Food Issues Problem Solving
FARE*4000 [0.50] Agricultural and Food Policy
FARE*4220 [0.50] Advanced Agribusiness Management
0.50 electives or restricted electives

Restricted Electives
A minimum of 1.00 credits from the following list:
FARE*1300 [0.50] Poverty, Food & Hunger
FARE*2700 [0.50] Survey of Natural Resource Economics
FARE*3170 [0.50] Cost-Benefit Analysis
FARE*3250 [0.50] Food and International Development
FARE*4210 [0.50] World Agriculture, Food Security and Economic Development
FARE*4290 [0.50] Land Economics
FARE*4310 [0.50] Resource Economics
FARE*4360 [0.50] Marketing Research
FARE*4500 [0.50] Decision Science
FARE*4550 [0.50] Independent Studies I
FARE*4560 [0.50] Independent Studies II

Food and Agricultural Business (Co-op) (FAB:C)

Department of Food, Agricultural and Resource Economics, Ontario Agricultural College

In this major, students will acquire the management education needed to succeed in the dynamic and innovative food and agribusiness industries. Building on an understanding of economic theory and applied methods in both the Canadian and the global context, the program prepares graduates with technical, entrepreneurial and leadership skills for a variety of professional opportunities in industry, government agencies and non-governmental organizations. The major provides a complete foundation for further studies leading to a graduate degree or professional accounting designation.

A principal aim of the Co-op program in Food and Agricultural Business is to facilitate the transition of students from academic studies to a professional career by enhancing the integration of theory and practice.
Students interested in languages and/or participating in study abroad programs may use a combination of their restricted or free electives to study one or more of the various languages taught at the University or to take courses while abroad. Students interested in independent study courses (e.g. HTM*4130, HTM*4140, HTM*4150, HTM*4500) may use a combination of their restricted or free electives to study one or more of these special topic courses. For more information regarding current offerings, students should consult the Faculty Advisor.

**Degree Requirements (20.00 Total Credits)**

- **13.50 - Required Core Courses**
  - 3.50 - Area of Emphasis (Restricted Electives)
  - 0.00 – MGMT*1100 (Business Career Preparation)
  - 1.50 - Liberal Education Electives
  - 1.50 - Free Electives

**Major**

**Semester 1**
- ECON*1050 [0.50] Introductory Microeconomics
- HTM*1700 [0.50] Foodservice Management
- MCS*1000 [0.50] Introductory Marketing
- MGMT*1000 [1.00] Introduction to Business

**Semester 2**
- ACCT*1220 [0.50] Introductory Financial Accounting
- ECON*1100 [0.50] Introductory Macroeconomics
- HTM*1160 [0.50] Lodging Operations
- MATH*1030 [0.50] Business Mathematics

0.50 electives or areas of emphasis

**Semester 3**
- HTM*1070 [0.50] Responsible Tourism Policy and Planning
- MCS*3040 [0.50] Business and Consumer Law

One of:
- ECON*2740 [0.50] Economic Statistics
- STAT*2060 [0.50] Statistics for Business Decisions

**Semester 4**
- MCS*2020 [0.50] Information Management
- MGMT*1100 [0.00] Business Career Preparation

**Semester 3 or 4**
- ACCT*2230 [0.50] Management Accounting
- HROB*2090 [0.50] Individuals and Groups in Organizations
- HTM*2010 [0.50] Hospitality and Tourism Business Communications
- HTM*2030 [0.50] Control Systems in the Hospitality Industry

1.00 electives or areas of emphasis

**Semester 5 or 6**
- ECON*2560 [0.50] Introduction to Finance
- HROB*2290 [0.50] Human Resources Management
- HTM*3080 [0.50] Marketing Strategy for Hospitality Managers
- HTM*3120 [0.50] Service Operations Analysis
- MGMT*3020 [0.50] Corporate Social Responsibility
- MGMT*3320 [0.50] Financial Management

2.00 electives or areas of emphasis

**Semester 7 or 8**
- HTM*4080 [0.50] Experiential Learning and Leadership in the Hospitality and Tourism Industry
- HTM*4190 [0.50] Hospitality and Tourism Industry Consultation
- HTM*4250 [0.50] Hospitality Revenue Management
- MGMT*4000 [0.50] Strategic Management

3.00 electives or areas of emphasis

An integral part of the HTM major is experiential learning, which means that theory is balanced with practice. Students are encouraged to participate in guided learning opportunities outside the conventional classroom, such as independent study courses, study abroad, and numerous networking events with industry leaders.

**Additional information:**
- 1200 hours of verified work experience in the hospitality and tourism industry is required for students to be eligible for graduation.
- 700 hours of hospitality and tourism work experience must be completed before a student enters Semester 7.

Elective options enable students to select courses that support or complement their area of emphasis. Examples:

1. Students may use a combination of courses from their major, liberal education and free electives to earn the Certificate in Leadership. For information about this certificate and its course requirements, see http://www.leadershipcertificate.com/
2. Students interested in languages and/or participating in study abroad programs may use a combination of their liberal education or free electives to study one or more of the various languages taught at the University or to take courses while abroad.
3. Students interested in independent study courses (e.g. HTM*4130, HTM*4140, HTM*4150, HTM*4500) may use a combination of their restricted or free electives to study one or more of these special topic courses. For more information regarding current offerings, students should consult the Faculty Advisor.
Areas of Emphasis

Students in the Hospitality and Tourism Management (HTM) major choose one of the three areas of emphasis: Hotel and Lodging; Restaurant and Foodservice; or Tourism. Students should declare an area of emphasis by semester 4 in order to facilitate course selection for their chosen area. See the HTM Academic Advisor to declare your area of emphasis.

Hotel and Lodging

Semester 4, 6 or 8
HTM*2070 [0.50] Event Management
Semester 5 or 7
HTM*3060 [0.50] Lodging Management
Semester 7
HTM*4090 [0.50] Hospitality Development, Design and Sustainability
Semester 8
HTM*4060 [0.50] Advanced Lodging Management

1.50 credits of:
EDRD*3160 [0.50] International Communication
FARE*4360 [0.50] Marketing Research
HROB*2200 [0.50] Labour Relations
HTM*3160 [0.50] Destination Management and Marketing
HTM*3180 [0.50] Casino Operations Management
MGMT*4260 [0.50] International Business
REAL*1820 [0.50] Real Estate and Housing
REAL*2820 [0.50] Real Estate Finance
REAL*3810 [0.50] Real Estate Market Analysis
REAL*3890 [0.50] Property Management
REAL*4820 [0.50] Real Estate Appraisal
REAL*4840 [0.50] Housing and Real Estate Law

Restaurant and Foodservice

Semester 4, 5 or 6
HTM*2700 [0.50] Understanding Foods
Semester 5 or 6
HTM*3090 [1.00] Restaurant Operations Management
Semester 8
HTM*4110 [0.50] Advanced Food Service Operations

1.50 credits of:
FOOD*3700 [0.50] Sensory Evaluation of Foods
HROB*3010 [0.50] Compensation Systems
HROB*3070 [0.50] Recruitment and Selection
HROB*3090 [0.50] Training and Development
HROB*4060 [0.50] Human Resource Planning
HTM*2070 [0.50] Event Management
HTM*2740 [0.50] Cultural Aspects of Food
HTM*3030 [0.50] Beverage Management
HTM*3780 [0.50] Managing Food in Canada
HTM*4050 [0.50] Wine and Oenology
MCS*3010 [0.50] Quality Management
NUTR*1010 [0.50] Introduction to Nutrition

Tourism

Semester 6
GEOG*3490 [0.50] Tourism and Environment
HTM*3160 [0.50] Destination Management and Marketing
Semester 8
FARE*4360 [0.50] Marketing Research
HTM*4170 [0.50] International Tourism

1.50 credits of:
ECON*2100 [0.50] Economic Growth and Environmental Quality
ECON*2650 [0.50] Introductory Development Economics
ECON*4830 [0.50] Economic Development
EDRD*3400 [0.50] Sustainable Communities
EDRD*3500 [0.50] Recreation and Tourism Planning
EDRD*4010 [0.50] Tourism Planning in the Less Developed World
GEOG*1220 [0.50] Human Impact on the Environment
GEOG*2210 [0.50] Environment and Resources
HTM*2070 [0.50] Event Management
HTM*3180 [0.50] Casino Operations Management
LARC*2820 [0.50] Urban and Regional Planning
MCS*3030 [0.50] Research Methods

Hospitality and Tourism Management Co-op (HTM:C)

The Hospitality and Tourism Management (HTM) major prepares students to assume positions of responsibility within the world’s largest industry.

In the first two years of study, students are introduced to foundational business skills and knowledge; and provided with an in-depth overview of the industry’s three sectors: hotel and lodging; restaurant and foodservice; and tourism.

By the end of the second year, students must choose one of those sectors as their area of emphasis. For the remainder of the program, the courses and learning opportunities that students encounter have one goal: to help them cultivate the knowledge, skills and understanding required of a managerial leader in their chosen area.

Topics of study for all three areas of emphasis includes:
- human resources management;
- marketing;
- accounting;
- communications

The hotel and lodging area includes:
- operations;
- event management;
- design

The restaurant and foodservice area includes:
- food systems;
- restaurant management;
- beverage management

The tourism area includes:
- planning and development;
- sustainability;
- international tourism

The principal aim of the Hospitality and Tourism Management Co-op program is to facilitate the transition of students from academic studies to a professional work life by enhancing the integration of theory and practice. The focus on experiential learning means that theory is balanced with practice. Students are encouraged to participate in guided learning opportunities outside the conventional classroom, such as independent study courses, study abroad and numerous networking events with industry leaders. Team work is a significant part of the core courses.

Elective options enable students to select courses that support or complement their primary field of study. Examples:
1) Students may use a combination of courses from their major, liberal education and free electives to earn the Certificate in Leadership. For information about this certificate and its course requirements, see http://www.leadershipcertificate.com/
2) Students interested in languages and/or participating in study abroad programs may use a combination of their liberal education or free electives to study one or more of the various languages taught at the University or to take courses while abroad.
3) Students interested in independent study courses (e.g. HTM*4500, HTM*4130, HTM*4140, HTM*4150) may use a combination of their restricted or free electives to study one or more of these special topic courses. For more information regarding current offerings, students should consult the Faculty Advisor.

Program Requirements

The Co-op program in Hospitality and Tourism Management is a five year program, including three work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td></td>
<td>COOP*1000 Work Term I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>COOP*3000</td>
<td>Work Term III</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 5</td>
<td>Academic Semester 6</td>
<td>Off</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (21.50 Total Credits)

13.50 - Required Core Courses
3.50 - Area of Emphasis (Restricted Electives)
1.50 - Liberal Education Electives
Areas of Emphasis

Students in the Hospitality and Tourism Management (HTM) major choose one of the three areas of emphasis: Hotel and Lodging; Restaurant and Foodservice; or Tourism. Students should declare an area of emphasis by semester 4 in order to facilitate course selection for their chosen area. See the HTM Academic Advisor to declare your area of emphasis.

### Hotel and Lodging

**Semester 4, 6 or 8 - Winter**
- HTM*2070 [0.50] Event Management

**Semester 5 or 7 - Fall**
- HTM*3060 [0.50] Lodging Management

**Semester 7 - Fall**
- HTM*4090 [0.50] Hospitality Development, Design and Sustainability

**Semester 8 - Winter**
- HTM*4060 [0.50] Advanced Lodging Management

1.50 credits of:
- EDRD*3160 [0.50] International Communication
- FARE*4360 [0.50] Marketing Research
- HROB*2200 [0.50] Labour Relations

### Restaurant and Foodservice

**Semester 4, 5 or 6 - Fall or Winter**
- HTM*2700 [0.50] Understanding Foods

**Semester 5 or 6 - Fall or Winter**
- HTM*3090 [1.00] Restaurant Operations Management

**Semester 8 - Winter**
- HTM*4110 [0.50] Advanced Food Service Operations

### Tourism

**Semester 6 - Winter**
- GEOG*3490 [0.50] Tourism and Environment
- HTM*3160 [0.50] Destination Management and Marketing

**Semester 8 - Winter**
- FARE*4360 [0.50] Marketing Research
- HTM*4170 [0.50] International Tourism

1.50 credits of:
- ECON*2100 [0.50] Economic Growth and Environmental Quality
- ECON*2650 [0.50] Introductory Development Economics
- ECON*4830 [0.50] Economic Development
- EDRD*3400 [0.50] Sustainable Communities
- EDRD*3500 [0.50] Recreation and Tourism Planning
- EDRD*4010 [0.50] Tourism Planning in the Less Developed World
- GEOG*1220 [0.50] Human Impact on the Environment
- GEOG*2210 [0.50] Environment and Resources
- HTM*2070 [0.50] Event Management
- HTM*3180 [0.50] Casino Operations Management
- LARC*2820 [0.50] Urban and Regional Planning
- MCS*3030 [0.50] Research Methods

### Management (MGMT)

#### Department of Marketing, Gordon S. Lang School of Business and Economics

The major in Management provides a balanced foundation of management knowledge and strategic leadership skills that will enable graduates to one day work as professional managers and organizational leaders. The major focuses on broad, transferrable competencies within the academic discipline of management (i.e., planning and goal setting, strategy development and execution, managerial decision making, designing organizational structure, managing change and innovation, motivating individuals and teams, managerial communication, negotiation and conflict management), while simultaneously providing the flexibility to explore a wide range of courses in other business disciplines. This major is well suited to students with a strong interest in the core skills of management who wish to develop a broad understanding and expertise in business management.

Courses extend beyond the traditional lecture based format to include community based group projects, guest lecturers, in-class simulations and case-based learning to help link academic expertise and theory with industry practice. Experiential learning is an integral part of the major, and occurs through the integration of industry examples in the classroom, and a required management capstone course that takes a consulting perspective to address real-world and simulated organizational challenges.

Graduates of the Management major will leave the University of Guelph equipped with a range of knowledge and skills which prepare them to meet management needs of the future in such roles as management consultant, business analyst, talent management specialist or as future general managers.

#### Degree Requirements (20.00 Total Credits)

13.50 - Required Core Courses
- HTM*3160 [0.50] Destination Management and Marketing
- HTM*3180 [0.50] Casino Operations Management
- MGMT*4260 [0.50] International Business
- REAL*1820 [0.50] Real Estate and Housing
- REAL*2820 [0.50] Real Estate Finance
- REAL*3810 [0.50] Real Estate Market Analysis
- REAL*3890 [0.50] Property Management
- REAL*4820 [0.50] Real Estate Appraisal
- REAL*4840 [0.50] Housing and Real Estate Law
- Restaurant and Foodservice
- Understanding Foods
- Restaurant Operations Management
- Sensory Evaluation of Foods
- Compensation Systems
- Recruitment and Selection
- Training and Development
- Human Resource Planning
- Event Management
- Cultural Aspects of Food
- Beverage Management
- Managing Food in Canada
- Wine and Oenology
- Quality Management
- Introduction to Nutrition
- Economic Growth and Environmental Quality
- Introductory Development Economics
- Economic Development
- Sustainable Communities
- Recreation and Tourism Planning
- Tourism Planning in the Less Developed World
- Human Impact on the Environment
- Environment and Resources
- Event Management
- Casino Operations Management
- Urban and Regional Planning
- Research Methods
- Co-op Work Term I
- Economic Development
- Casino Operations Management
- Introductory Financial Accounting
- Introductory Microeconomics
- Foodservice Management
- Introductory Marketing
- Introduction to Business
- Lodging Operations
- Business Mathematics
- Management Accounting
- Individuals and Groups in Organizations
- Responsible Tourism Policy and Planning
- Business and Consumer Law
- Urban and Regional Planning
- Information Management
- Introduction to Co-operative Education
- Economic Statistics
- Statistics for Business Decisions
- Co-op Work Term II
- Management Accounting
- Individuals and Groups in Organizations
- Responsible Tourism Policy and Planning
- Business and Consumer Law
- Urban and Regional Planning
- Information Management
- Introduction to Co-operative Education
- Economic Statistics
- Statistics for Business Decisions
- Co-op Work Term III
- Management Accounting
- Individuals and Groups in Organizations
- Responsible Tourism Policy and Planning
- Business and Consumer Law
- Urban and Regional Planning
- Information Management
- Introduction to Co-operative Education
- Economic Statistics
- Statistics for Business Decisions
- Co-op Work Term
- Management Accounting
- Individuals and Groups in Organizations
- Responsible Tourism Policy and Planning
- Business and Consumer Law
- Urban and Regional Planning
- Information Management
- Introduction to Co-operative Education
- Economic Statistics
- Statistics for Business Decisions
- Co-op Work Term
A principal aim of the Co-op program in Management is to facilitate the transition of students from academic studies to a professional career by enhancing the integration of theory and practice.  

**Program Requirements**

The Co-op program in Management is a five-year program, including 4 four work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Management Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 6</td>
</tr>
<tr>
<td>4</td>
<td>COOP*3000 Work Term III</td>
<td>COOP*4000 Work Term IV</td>
<td>Off</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

**Credit Summary (21.50 Total Credits)**

|             | 13.50 - Required Core Courses | 1.50 - Liberal Education Electives | 5.00 - Free Electives | 1.50 Co-op Work Terms |

**Note:** A minimum of three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fourth Co-op work term is optional and if completed, the total number of credits will equal 22.00.

The recommended program sequence is outlined below.

**Major**

**Semester 1 - Fall**

- ECON*1050 [0.50] Introductory Microeconomics
- MCS*1000 [0.50] Introductory Marketing
- MGMT*1000 [1.00] Introduction to Business

**Semester 2**

- ECON*1100 [0.50] Introductory Macroeconomics
- HRB*2090 [0.50] Individuals and Groups in Organizations
- MATH*1030 [0.50] Business Mathematics
- MGMT*1200 [0.50] Principles of Management

**Semester 3**

- ACCT*1220 [0.50] Introductory Financial Accounting
- HRB*2100 [0.50] Foundations of Leadership
- HRB*2290 [0.50] Human Resources Management
- MGMT*1100 [0.50] Business Career Preparation
- STAT*2060 [0.50] Statistics for Business Decisions

**Semester 4**

- ACCT*2230 [0.50] Management Accounting
- ECON*2560 [0.50] Introduction to Finance
- MCS*2020 [0.50] Information Management

**Semester 5**

- MATH*3040 [0.50] Business and Consumer Law
- MGMT*3020 [0.50] Corporate Social Responsibility
- MGMT*3140 [0.50] Business Analytics
- MGMT*3200 [0.50] Negotiation and Conflict Management

**Semester 6**

- FARE*3310 [0.50] Operations Management
- HRB*3100 [0.50] Developing Management and Leadership Competencies
- MGMT*3300 [0.50] Project Management
- MGMT*3320 [0.50] Financial Management

**Semester 7**

- MGMT*4000 [0.50] Strategic Management
- MGMT*4100 [0.50] Management Decision Making

**Semester 8**

- MGMT*4040 [0.50] Advanced Topics in Management
- MGMT*4200 [0.50] Management Capstone

**Management (Co-op) (MGMT:C)**

The major in Management provides a balanced foundation of management knowledge and strategic leadership skills that will enable graduates to one day work as professional managers and organizational leaders. The major focuses on broad, transferrable competencies within the academic discipline of management (i.e., planning and goal setting, strategy development and execution, managerial decision making, designing organizational structure, managing change and innovation, motivating individuals and teams, managerial communication, negotiation and conflict management), while simultaneously providing the flexibility to explore a wide range of courses in other business disciplines. This major is well suited to students with a strong interest in the core skills of management who wish to develop a broad understanding and expertise in business management.

Courses extend beyond the traditional lecture based format to include community based group projects, guest lecturers, in-class simulations and case-based learning to help link academic expertise and theory with industry practice. Experiential learning is an integral part of the major, and occurs through the integration of industry examples in the classroom, and a required management capstone course that takes a consulting perspective to address real-world and simulated organizational challenges.

Graduates of the Management major will leave the University of Guelph equipped with a range of knowledge and skills which prepare them to meet management needs of the future in such roles as management consultant, business analyst, talent management specialist or as future general managers.
Semester 6 - Summer
- MCS*3040 [0.50] Business and Consumer Law
- MGMT*3020 [0.50] Corporate Social Responsibility
- MGMT*3140 [0.50] Business Analytics
- MGMT*3320 [0.50] Financial Management
- 0.50 electives

Fall Semester
- COOP*3000 [0.50] Co-op Work Term III
  (Eight month work term in conjunction with COOP*4000)

Winter Semester
- COOP*4000 [0.50] Co-op Work Term IV
  (Eight month work term in conjunction with COOP*3000)

Semester 7 - Fall
- MGMT*4000 [0.50] Strategic Management
- MGMT*4100 [0.50] Management Decision Making
- 1.50 electives

Semester 8 - Winter
- MGMT*4040 [0.50] Advanced Topics in Management
- MGMT*4200 [0.50] Management Capstone
- 1.50 electives

Management Economics and Finance (MEF)

Degree Requirements (20.00 Total Credits)

10.50 - Required Core Courses
6.00 - Restricted Electives (from lists)
0.00 – MGMT*1100 (Business Career Preparation)
1.50 - Liberal Education Electives
2.00 - Free Electives

Major

Semester 1
- ECON*1050 [0.50] Introductory Microeconomics
- MGMT*1000 [1.00] Introduction to Business
  One of:
  - MATH*1030 [0.50] Business Mathematics
  - MATH*1200 [0.50] Calculus I
- 0.50 electives

*Note: MATH*1200 is recommended for the Finance Area of Emphasis.

Semester 2
- ACCT*1220 [0.50] Introductory Financial Accounting
- ECON*1100 [0.50] Introductory Macroeconomics
- HRMB*2090 [0.50] Individuals and Groups in Organizations
- MCS*1000 [0.50] Introductory Marketing
- 0.50 electives

Semester 3
- ACCT*2230 [0.50] Management Accounting
- ECON*2310 [0.50] Intermediate Microeconomics
- ECON*2740 [0.50] Economic Statistics
- ECON*2770 [0.50] Introductory Mathematical Economics
- MCS*2020 [0.50] Information Management
- MGMT*1100 [0.00] Business Career Preparation

*Note: Students who wish to take the Statistics courses listed under the Finance Area of Emphasis may select STAT*2040 in place of ECON*2740.

Semester 4
- ECON*2410 [0.50] Intermediate Macroeconomics
- ECON*2560 [0.50] Introduction to Finance
- MCS*3040 [0.50] Business and Consumer Law **
- MGMT*3320 [0.50] Financial Management
- 0.50 electives or restricted electives in an area of emphasis

*Note: Students may select REAL*4840 in place of MCS*3040. This is a Fall semester course and can be completed in any Fall semester, provided the prerequisites are completed.

Semester 5
- ECON*3740 [0.50] Introduction to Econometrics
- MGMT*3020 [0.50] Corporate Social Responsibility
- 1.50 electives or restricted electives

Note: ECON*3710 is required for the Finance Area of Emphasis.

Semester 6
- FARE*3310 [0.50] Operations Management
- 2.00 electives or restricted electives

Note: ECON*3810 is required for the Finance Area of Emphasis

Semester 7
- 2.50 electives or restricted electives

Semester 8
- MGMT*4000 [0.50] Strategic Management
- 2.00 electives or restricted electives

Areas of Emphasis

Students choose either Finance or Management as an area of emphasis in the MEF major. This choice should be made by semester 5. See the Economics and Finance departmental advisor to declare an area of emphasis.

FINANCE Area of Emphasis
- ECON*3710 [0.50] Advanced Microeconomics
- ECON*3810 [0.50] Advanced Macroeconomics
- ECON*4560 [0.50] Advanced Topics in Finance
- 1.50 credits from the following Finance courses:
  - ECON*3360 [0.50] The Strategy of Mergers and Acquisitions
  - ECON*3660 [0.50] Investments
  - ECON*3760 [0.50] Fundamentals of Derivatives
  - ECON*3860 [0.50] International Finance
  - ECON*3960 [0.50] Money, Credit and the Financial System
- 1.50 Economics credits at the 3000 or 4000 level

In addition to the required credits listed above, students must take a minimum of 1.5 credits in restricted electives. Restricted electives are listed below and have been grouped in major topical areas which are related to, or are an extension of, the professional interests of the major. Students may, however, choose restricted electives from any of those listed without regard to the categories, which are intended to be suggestive.

Courses toward a professional designation as a Chartered Financial Analyst (CFA)
- ACCT*3330 [0.50] Intermediate Financial Accounting I
- ACCT*3340 [0.50] Intermediate Financial Accounting II
- ECON*3660 [0.50] Investments
- ECON*3760 [0.50] Fundamentals of Derivatives
- ECON*4660 [0.50] Risk Management in Finance and Insurance
- ECON*4760 [0.50] Topics in Monetary Economics

Courses in Quantitative Finance
- ECON*3100 [0.50] Game Theory
- ECON*4640 [0.50] Advanced Econometrics
- ECON*4700 [0.50] Advanced Mathematical Economics
- ECON*4840 [0.50] Financial Econometrics
- MATH*1160 [0.50] Linear Algebra I
- MATH*1210 [0.50] Calculus II
- STAT*3100 [0.50] Introductory Mathematical Statistics I
- STAT*3110 [0.50] Introductory Mathematical Statistics II

Courses in preparation for post-graduate work in Economics (MA)
- ECON*4640 [0.50] Advanced Econometrics
- ECON*4710 [0.50] Advanced Topics in Microeconomics
- ECON*4810 [0.50] Advanced Topics in Macroeconomics

Community Engagement Courses
- MGMT*4050 [0.50] Business Consulting
- MGMT*4350 [0.50] Business Case Competition Preparation
- MGMT*4350 [0.50] Business Case Competition Preparation

Courses for Computational Finance
- CIS*1910 [0.50] Discrete Structures in Computing I
- CIS*2500 [0.50] Intermediate Programming
- CIS*2520 [0.50] Data Structures
- CIS*2750 [0.75] Software Systems Development and Integration
- CIS*3750 [0.75] System Analysis and Design in Applications

MANAGEMENT Area of Emphasis
- ECON*4400 [0.50] Managerial Economics
- 1.50 credits from the following Finance courses:
  - ECON*3360 [0.50] The Strategy of Mergers and Acquisitions
  - ECON*3660 [0.50] Investments
  - ECON*3760 [0.50] Fundamentals of Derivatives
  - ECON*3860 [0.50] International Finance
  - ECON*3960 [0.50] Money, Credit and the Financial System
- 2.50 additional credits in economics of which at least 0.50 must be at the 4000 level and at most 0.50*** may be at the 2000 level.

*** May be replaced with a 4000 level 0.50 credits in Accounting.
In addition to the economics credits listed above, students must take a minimum of 1.50 credits in restricted electives listed below. These courses have been grouped in major topical areas which are related to various professional interests. Students may, however, choose restricted electives from any of those listed without regard to the categories.

Courses toward a professional accounting designation Chartered Professional Accountants (CPA)


- ACCT*3230 [0.50] Intermediate Management Accounting
- ACCT*3280 [0.50] Auditing I
- ACCT*3330 [0.50] Intermediate Financial Accounting I
- ACCT*3340 [0.50] Intermediate Financial Accounting II
- ACCT*3350 [0.50] Taxation
- ACCT*4220 [0.50] Advanced Financial Accounting
- ACCT*4230 [0.50] Advanced Management Accounting
- ACCT*4270 [0.50] Auditing II
- ACCT*4290 [0.50] IT Auditing and Data Analytics
- ACCT*4340 [0.50] Accounting Theory
- ACCT*4350 [0.50] Income Taxation II
- ACCT*4440 [0.50] Integrated Cases in Accounting

Courses to prepare for the Certified Human Resource Professional (CHRP) designation

(see [http://www.business.uoguelph.ca/business/academic-advisor-careers-chrp.shtml](http://www.business.uoguelph.ca/business/academic-advisor-careers-chrp.shtml) for more information)

- HROB*2200 [0.50] Labour Relations
- HROB*2290 [0.50] Human Resources Management
- HROB*3010 [0.50] Compensation Systems
- HROB*3030 [0.50] Occupational Health and Safety
- HROB*3070 [0.50] Recruitment and Selection
- HROB*3090 [0.50] Training and Development
- HROB*4060 [0.50] Human Resource Planning

Courses to prepare for a post-graduate program in Industrial Relations:

- ECON*3400 [0.50] The Economics of Personnel Management
- ECON*3520 [0.50] Labour Economics
- ECON*3620 [0.50] International Trade
- ECON*4790 [0.50] Topics in Labour Market Theory
- HROB*2200 [0.50] Labour Relations
- HROB*2290 [0.50] Human Resources Management
- HROB*3010 [0.50] Compensation Systems
- HROB*3030 [0.50] Occupational Health and Safety
- HROB*3070 [0.50] Recruitment and Selection
- HROB*3090 [0.50] Training and Development
- HROB*4060 [0.50] Human Resource Planning

Courses toward the Leadership Certificate:

(see [http://www.leadershipcertificate.com/](http://www.leadershipcertificate.com/) for more information)

- HROB*2100 [0.50] Foundations of Leadership
- HROB*4010 [0.50] Leadership Certificate Capstone
- POLS*2250 [0.50] Public Administration and Governance
- POLS*3440 [0.50] Corruption, Scandal and Political Ethics

Courses in Public Administration:

- ECON*3610 [0.50] Public Economics
- POLS*2250 [0.50] Public Administration and Governance
- POLS*2300 [0.50] Canadian Government and Politics
- POLS*3210 [0.50] The Constitution and Canadian Federalism
- POLS*3250 [0.50] Public Policy: Challenges and Prospects
- POLS*3270 [0.50] Local Government in Ontario
- POLS*3470 [0.50] Business-Government Relations in Canada

Courses in Real Estate and Housing:

- ECON*3500 [0.50] Urban Economics **
- REAL*1820 [0.50] Real Estate and Housing
- REAL*2820 [0.50] Real Estate Finance
- REAL*3890 [0.50] Property Management
- REAL*4820 [0.50] Real Estate Appraisal **

** These courses count towards the Post Graduate Valuation Certificate offered by UBC, part of the requirements to obtain an Accredited Appraiser Canadian Institute designation

Courses in Corporate Social Responsibility:

- BUS*4550 [0.50] Applied Business Project I
- BUS*4560 [0.50] Applied Business Project II
- ECON*2650 [0.50] Introductory Development Economics
- ECON*3300 [0.50] Economics of the Workplace
- ECON*4930 [0.50] Environmental Economics
- HROB*3030 [0.50] Occupational Health and Safety
- REAL*2850 [0.50] Service Learning in Housing
- MGMT*4050 [0.50] Business Consulting
- MGMT*4060 [0.50] Business Consulting

Courses in Marketing:

- ACCT*1220 [0.50] Applied Business Project I
- MGMT*1000 [1.00] Introduction to Business

One of:

- MATH*1030 [0.50] Business Mathematics
- MATH*1200 [0.50] Calculus I

0.50 Electives

*Note: MATH*1200 is recommended for the Finance Area of Emphasis.

Semester 2 - Winter

- ACCT*1220 [0.50] Applied Business Project II
- ECON*1100 [0.50] Introduction to Macro Economics
- HROB*2090 [0.50] Individuals and Groups in Organizations

Courses in Food and Agribusiness:

- FARE*2410 [0.50] Agrifoods Markets and Policy
- FARE*3030 [0.50] The Firm and Markets
- FARE*3170 [0.50] Cost-Benefit Analysis
- FARE*4000 [0.50] Agricultural and Food Policy
- FARE*4220 [0.50] Advanced Agribusiness Management

** These courses count towards the Post Graduate Valuation Certificate offered by UBC, part of the requirements to obtain an Accredited Appraiser Canadian Institute designation

Courses in Food and Agribusiness:

- FARE*2410 [0.50] Agrifoods Markets and Policy
- FARE*3030 [0.50] The Firm and Markets
- FARE*3170 [0.50] Cost-Benefit Analysis
- FARE*4000 [0.50] Agricultural and Food Policy
- FARE*4220 [0.50] Advanced Agribusiness Management

Management Economics and Finance (Co-op) (MEF:C)

Department of Economics and Finance, Gordon S. Lang School of Business and Economics

The Management Economics and Finance major is designed to offer students an appreciation of business and economic problems particularly in the area of finance. The major provides a suitable education for a career in the business world or in the public service. It also constitutes a useful preparation for more advanced studies, including graduate studies in Economics, Finance, Business Administration, Accounting, Industrial Relations, Law, and Public Policy. The major is administered by the Department of Economics and Finance and students are urged to consult the faculty advisor.

A principal aim of the Co-op program in Management Economics and Finance is to facilitate the transition of students from academic studies to a professional career by enhancing the integration of theory and practice.

Program Requirements

The Co-op program in Management Economics and Finance is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: [https://www.studentcooperative.ubc.ca/ccecu/](https://www.studentcooperative.ubc.ca/ccecu/)). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Management Economics and Finance Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 4</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*2000 Work Term II</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*5000 Work Term V</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>COOP*4000 Work Term IV</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (22.00 Total Credits)

- 10.50 - Required Core Courses
- 6.00 - Restricted Electives (from lists)
- 1.50 - Liberal Education Electives
- 2.00 - Free Electives
- 2.00 - Co-op Work Terms

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed the total number of credits will equal 22.50.

The recommended program sequence is outlined below.

Major

Semester 1 - Fall

- ECON*1050 [0.50] Introductory Microeconomics
- MGMT*1000 [1.00] Introduction to Business
- One of:
  - MATH*1030 [0.50] Business Mathematics
  - MATH*1200 [0.50] Calculus I
- 0.50 Electives

*Note: MATH*1200 is recommended for the Finance Area of Emphasis.

Semester 2 - Winter

- ACCT*1220 [0.50] Applied Business Project II
- ECON*1100 [0.50] Introduction to Macroeconomics
- HROB*2090 [0.50] Individuals and Groups in Organizations

Bachelor of Commerce (B.Com.)

Degree Programs, Bachelor of Commerce (B.Comm.)
Courses toward a professional designation as a Chartered Financial Analyst (CFA):

- ECON*3100 [0.50] Game Theory
- ECON*4640 [0.50] Advanced Econometrics
- ECON*4700 [0.50] Advanced Mathematical Economics
- ECON*4840 [0.50] Financial Econometrics
- MATH*1160 [0.50] Linear Algebra I
- MATH*1210 [0.50] Calculus II
- STAT*3100 [0.50] Introduction to Mathematical Statistics I
- STAT*3110 [0.50] Introduction to Mathematical Statistics II

Courses in preparation for post-graduate work in Economics (MA):
- ECON*4640 [0.50] Advanced Econometrics
- ECON*4710 [0.50] Advanced Topics in Microeconomics
- ECON*4810 [0.50] Advanced Topics in Macroeconomics

Community Engagement Courses
- MGMT*4050 [0.50] Business Consulting
- MGMT*4350 [0.50] Business Case Competition Preparation
- MGMT*4350 [0.50] Business Case Competition Preparation

Courses for Computational Finance
- CIS*1910 [0.50] Discrete Structures in Computing I
- CIS*2500 [0.50] Intermediate Programming
- CIS*2520 [0.50] Data Structures
- CIS*2750 [0.75] Software Systems Development and Integration
- CIS*3750 [0.75] System Analysis and Design in Applications

MANAGEMENT Area of Emphasis
- ECON*4400 [0.50] Managerial Economics

1.5 credits from the following Finance courses:
- ECON*3360 [0.50] The Strategy of Mergers and Acquisitions
- ECON*3660 [0.50] Investments
- ECON*3760 [0.50] Fundamentals of Derivatives
- ECON*3860 [0.50] International Finance
- ECON*3960 [0.50] Money, Credit and the Financial System

2.50 additional credits in economics of which at least 0.50 must be at the 4000 level and at most 0.50** may be at the 2000 level.

** May be replaced with a 4000 level 0.50 credits in Accounting.

In addition to the economics credits listed above, students must take a minimum of 1.50 credits in restricted electives listed below. These courses have been grouped in major topical areas which are related to various professional interests. Students may, however, choose restricted electives from any of those listed without regard to the categories.

Courses toward a professional accounting designation Chartered Professional Accountants (CPA)


- ACCT*3230 [0.50] Intermediate Management Accounting
- ACCT*3280 [0.50] Auditing I
- ACCT*3330 [0.50] Intermediate Financial Accounting I
- ACCT*3340 [0.50] Intermediate Financial Accounting II
- ACCT*3350 [0.50] Taxation
- ACCT*4220 [0.50] Advanced Financial Accounting
- ACCT*4230 [0.50] Advanced Management Accounting
- ACCT*4270 [0.50] Auditing II
- ACCT*4290 [0.50] IT Auditing and Data Analytics
- ACCT*4340 [0.50] Accounting Theory
- ACCT*4350 [0.50] Income Taxation II
- ACCT*4420 [0.50] Advanced Management Accounting
- ACCT*4440 [0.50] Integrated Cases in Accounting

Courses to prepare for the Certified Human Resource Professional (CHRP) designation:

(see [http://www.uoguelph.ca/business/academic-advisor-careers-chrp.shtml](http://www.uoguelph.ca/business/academic-advisor-careers-chrp.shtml) for more information)

- HROB*2200 [0.50] Labour Relations
- HROB*2290 [0.50] Human Resources Management
- HROB*3010 [0.50] Compensation Systems
- HROB*3030 [0.50] Occupational Health and Safety
- HROB*3070 [0.50] Recruitment and Selection
- HROB*3090 [0.50] Training and Development

Courses to prepare for a post-graduate program in Industrial Relations:

- ECON*3400 [0.50] The Economics of Personnel Management
- ECON*3520 [0.50] Labour Economics
- ECON*3620 [0.50] International Trade
- ECON*4790 [0.50] Topics in Labour Market Theory
- HROB*2200 [0.50] Labour Relations
- HROB*2290 [0.50] Human Resources Management
- HROB*3010 [0.50] Compensation Systems
- HROB*3030 [0.50] Occupational Health and Safety
- HROB*3070 [0.50] Recruitment and Selection
- HROB*3090 [0.50] Training and Development
<table>
<thead>
<tr>
<th>Courses in Corporate Social Responsibility:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS*4550 [0.50] Applied Business Project I</td>
<td></td>
</tr>
<tr>
<td>BUS*4560 [0.50] Applied Business Project II</td>
<td></td>
</tr>
<tr>
<td>ECON*2650 [0.50] Introductory Development Economics</td>
<td></td>
</tr>
<tr>
<td>ECON*3300 [0.50] Economics of Health and the Workplace</td>
<td></td>
</tr>
<tr>
<td>ECON*4930 [0.50] Environmental Economics</td>
<td></td>
</tr>
<tr>
<td>HROB*3030 [0.50] Occupational Health and Safety</td>
<td></td>
</tr>
<tr>
<td>REAL*2850 [0.50] Service Learning in Housing</td>
<td></td>
</tr>
<tr>
<td>MGMT*4050 [0.50] Business Consulting</td>
<td></td>
</tr>
<tr>
<td>MGMT*4060 [0.50] Business Consulting</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses in Marketing:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MCS*2600 [0.50] Fundamentals of Consumer Behaviour</td>
<td></td>
</tr>
<tr>
<td>MCS*3000 [0.50] Advanced Marketing</td>
<td></td>
</tr>
<tr>
<td>MCS*3010 [0.50] Quality Management</td>
<td></td>
</tr>
<tr>
<td>MCS*3620 [0.50] Marketing Communications</td>
<td></td>
</tr>
<tr>
<td>MCS*4400 [0.50] Pricing Management</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses in Food and Agribusiness:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FARE*2410 [0.50] Agrifood Markets and Policy</td>
<td></td>
</tr>
<tr>
<td>FARE*3030 [0.50] The Firm and Markets</td>
<td></td>
</tr>
<tr>
<td>FARE*3170 [0.50] Cost-Benefit Analysis</td>
<td></td>
</tr>
<tr>
<td>FARE*4000 [0.50] Agricultural and Food Policy</td>
<td></td>
</tr>
<tr>
<td>FARE*4220 [0.50] Advanced Agribusiness Management</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marketing Management (MKMN)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Management, Gordon S. Lang School of Business and Economics</td>
<td></td>
</tr>
</tbody>
</table>

The Marketing Management major is interdisciplinary, follows a liberal education philosophy, and is built on the Department’s expertise in the field of marketing and consumer research.

The Department of Marketing and Consumer Studies prepares students for a career in marketing but also for educating them so that they can be active and engaged citizens.

Students will gain knowledge in creating, communicating, and delivering product offerings that provide students with an understanding of the world they will work and live in. Students will gain knowledge in creating, communicating, and delivering product offerings that provide students with an understanding of the world they will work and live in.

Elective options enable students to select courses which support or complement their primary field of study. Examples: (1) students can use a combination of restricted, Liberal Education, and free electives to earn the Certificate in Leadership. See http://www.leadershipcertificate.com/ for information about this certificate and its course requirements. (2) students interested in languages and/or going on exchange can use their Liberal Education and free electives to study one or more of the various languages taught at the University. Note: students also can take courses of interest as electives without concern for categories.

<table>
<thead>
<tr>
<th>Degree Requirements (20.00 Total Credits)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13.00 - Required Core Courses</td>
<td></td>
</tr>
<tr>
<td>2.50 - Restricted Electives (from lists)</td>
<td></td>
</tr>
<tr>
<td>0.00 – MGMT*1100 (Business Career Preparation)</td>
<td></td>
</tr>
<tr>
<td>1.50 - Liberal Education Electives</td>
<td></td>
</tr>
<tr>
<td>3.00 - Free Electives</td>
<td></td>
</tr>
</tbody>
</table>

**Major**

<table>
<thead>
<tr>
<th>Semester 1 - Fall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*1050 [0.50] Introductory Microeconomics</td>
<td></td>
</tr>
<tr>
<td>MGMT*1000 [1.00] Introduction to Business</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2 - Winter</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC*1220 [0.50] Introductory Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>ECON*1100 [0.50] Introductory Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>MCS*1000 [0.50] Introductory Marketing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semesters 1 or 2 - Fall or Winter</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH*1030 [0.50] Business Mathematics</td>
<td></td>
</tr>
<tr>
<td>PSYC*1000 [0.50] Introduction to Psychology</td>
<td></td>
</tr>
<tr>
<td>0.50 Marketing Environment electives (see List E1)</td>
<td></td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 3 - Fall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC*2230 [0.50] Management Accounting</td>
<td></td>
</tr>
<tr>
<td>HROB*2090 [0.50] Individuals and Groups in Organizations</td>
<td></td>
</tr>
<tr>
<td>MCS*2000 [0.50] Business Communication in a Changing World</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 4 - Winter</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT*1100 [0.00] Business Career Preparation</td>
<td></td>
</tr>
</tbody>
</table>

One of:

| ECON*2740 [0.50] Economic Statistics |  |
| PSYC*1010 [0.50] Making Sense of Data in Psychological Research |  |
| STAT*2060 [0.50] Statistics for Business Decisions |  |

<table>
<thead>
<tr>
<th>Semesters 3 or 4 - Fall or Winter</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MICS*2020 [0.50] Information Management</td>
<td></td>
</tr>
<tr>
<td>MICS*2600 [0.50] Fundamentals of Consumer Behaviour</td>
<td></td>
</tr>
<tr>
<td>MICS*3040 [0.50] Business and Consumer Law</td>
<td></td>
</tr>
<tr>
<td>0.50 History/Global Perspective electives (see List E2)</td>
<td></td>
</tr>
<tr>
<td>1.00 electives</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semesters 5 or 6 - Fall or Winter</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*2560 [0.50] Introduction to Finance</td>
<td></td>
</tr>
<tr>
<td>FARE*3310 [0.50] Operations Management</td>
<td></td>
</tr>
<tr>
<td>MICS*3030 [0.50] Research Methods</td>
<td></td>
</tr>
<tr>
<td>MICS*3500 [0.50] Marketing Analytics</td>
<td></td>
</tr>
<tr>
<td>MICS*3620 [0.50] Marketing Communications</td>
<td></td>
</tr>
<tr>
<td>MGMT*3320 [0.50] Financial Management</td>
<td></td>
</tr>
<tr>
<td>0.50 Leadership/Professionalism electives (see List E3)</td>
<td></td>
</tr>
<tr>
<td>1.50 electives</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semesters 7 or 8 - Fall or Winter</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MICS*3600 [0.50] Consumer Information Processes</td>
<td></td>
</tr>
<tr>
<td>MICS*3470 [0.50] Marketing Strategy</td>
<td></td>
</tr>
<tr>
<td>MICS*4600 [0.50] International Marketing</td>
<td></td>
</tr>
<tr>
<td>MGMT*3020 [0.50] Corporate Social Responsibility</td>
<td></td>
</tr>
<tr>
<td>MGMT*4000 [0.50] Strategic Management</td>
<td></td>
</tr>
<tr>
<td>0.50 Advanced Marketing electives (see List E4)</td>
<td></td>
</tr>
<tr>
<td>0.50 Experiential Learning Capstone electives (see List E5)</td>
<td></td>
</tr>
<tr>
<td>1.50 electives</td>
<td></td>
</tr>
</tbody>
</table>

**Restricted Electives for the Marketing Management Major**

Substitutions for restricted electives will be allowed if a Marketing and Consumer Studies Faculty Advisor agrees that a proposed alternative is relevant to marketing in today’s world and has an appropriate level of rigour.

**Marketing Environment Elective - List E1**

To supplement the knowledge students gain in MICS*1000 about the socio-cultural, economic, political/legal, and technological “environmental” factors that must be taken into consideration in making decision-making, marketing management majors must take one [0.50 credits] of:

<table>
<thead>
<tr>
<th>ANTH*1150 [0.50]</th>
<th>Introduction to Anthropology</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDDR*1400 [0.50]</td>
<td>Introduction to Design</td>
</tr>
<tr>
<td>FRHD*1010 [0.50]</td>
<td>Human Development</td>
</tr>
<tr>
<td>GEOG*1200 [0.50]</td>
<td>Society and Space</td>
</tr>
<tr>
<td>GEOG*1220 [0.50]</td>
<td>Human Impact on the Environment</td>
</tr>
<tr>
<td>GEOG*2510 [0.50]</td>
<td>Canada: A Regional Synthesis</td>
</tr>
<tr>
<td>NUTR*1010 [0.50]</td>
<td>Introduction to Nutrition</td>
</tr>
<tr>
<td>PHIL*2070 [0.50]</td>
<td>Philosophy of the Environment</td>
</tr>
<tr>
<td>POLS*1400 [0.50]</td>
<td>Issues in Canadian Politics</td>
</tr>
<tr>
<td>POLS*2250 [0.50]</td>
<td>Public Administration and Governance</td>
</tr>
<tr>
<td>POLS*2300 [0.50]</td>
<td>Canadian Government and Politics</td>
</tr>
<tr>
<td>SOC*1100 [0.50]</td>
<td>Sociology</td>
</tr>
</tbody>
</table>

**History/Global Elective - List E2**

To help marketing majors develop a sense of the fundamental relativity of knowledge and understanding over time and/or to help them gain the global perspective needed in senior marketing courses, marketing management majors must take one [0.50 credits] of:

| ARTH*2490 [0.50] | History of Canadian Art |
theory and practice. Students from academic studies to a professional career by enhancing the integration of leadership roles.

This major will be prepared to pursue a variety of marketing career paths and diverse to create value to stakeholders in a global and connected economy. Students completing

The Co-op program in Marketing Management is designed to facilitate the transition of students from academic studies to a professional career by enhancing the integration of leadership roles.

Marketing Management Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>COOP*4000 Work Term IV</td>
<td>COOP*5000 Work Term V</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term requirements. For additional program information students should consult with their Co-op Co-ordinator, listed on the Co-operative Education website.

Credit Summary (22.00 Total Credits)*

13.00 - Required Core Courses
2.50 - Restricted Electives (from lists)
1.50 - Liberal Education Electives
3.00 - Free Electives
2.00 Co-op Work Terms

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed the total number of credits will equal 22.50.

The recommended program sequence is outlined below.

Major

Semester 1 - Fall
ECON*1050 [0.50] Introductory Microeconomics
MCGT*1000 [1.00] Introduction to Business

Semester 2 - Winter
ACCT*1220 [0.50] Introductory Financial Accounting
ECON*1100 [0.50] Introductory Macroeconomics
MCS*1000 [0.50] Introductory Marketing

Semesters 1 or 2 - Fall or Winter
MATH*1030 [0.50] Business Mathematics
PSYC*1000 [0.50] Introduction to Psychology
0.50 Marketing Environment electives (see List E1) 0.50 electives

Semester 3 - Fall
ACCT*2230 [0.50] Management Accounting
COOP*1100 [0.00] Introduction to Co-operative Education
HROB*2090 [0.50] Individuals and Groups in Organizations
MCS*2000 [0.50] Business Communication in a Changing World

One of:
ECON*2740 [0.50] Economic Statistics
PSYC*1010 [0.50] Making Sense of Data in Psychological Research
STAT*2060 [0.50] Statistics for Business Decisions
0.50 electives

Semesters 4 - Winter
MCS*2020 [0.50] Information Management
MCS*2600 [0.50] Fundamentals of Consumer Behaviour
MCS*3030 [0.50] Research Methods
MCS*3040 [0.50] Business and Consumer Law
0.50 History/Global Perspective electives (see List E2)
Summer Semester

COOP*1000 [0.50] Co-op Work Term I

Fall Semester

COOP*2000 [0.50] Co-op Work Term II

Semester 5 - Winter

The following 5.00 credits must be completed over semesters 5 and 6. Select 2.50 credits in Winter Semester 5 and the remaining 2.50 in Fall Semester 6:

ECON*2560 [0.50] Introduction to Finance
FARE*3310 [0.50] Operations Management
MSC*3500 [0.50] Marketing Analytics
MSC*3620 [0.50] Marketing Communications
MGMT*3320 [0.50] Financial Management

0.50 Leadership/Professionalism electives (see List E3)
2.00 electives

Summer Semester

COOP*3000 [0.50] Co-op Work Term III

Semester 6 - Fall

Select 2.50 credits from the list below that were not taken in Winter Semester 5:

ECON*2560 [0.50] Introduction to Finance
FARE*3310 [0.50] Operations Management
MSC*3500 [0.50] Marketing Analytics
MSC*3620 [0.50] Marketing Communications
MGMT*3320 [0.50] Financial Management

0.50 Leadership/Professionalism electives (see List E3)
2.00 electives

Winter Semester

COOP*4000 [0.50] Co-op Work Term IV
(Eight month work term in conjunction with COOP*5000)

Summer Semester

COOP*5000 [0.50] Co-op Work Term V
(Eight month work term in conjunction with COOP*4000)

Semesters 7 or 8 - Fall or Winter

MSC*3600 [0.50] Consumer Information Processes
MSC*3470 [0.50] Marketing Strategy
MSC*4660 [0.50] International Marketing
MGMT*3020 [0.50] Corporate Social Responsibility
MGMT*4000 [0.50] Strategic Management

0.50 Advanced Marketing electives (see List E4)
0.50 Experiential Learning Capstone electives (see List E5)
1.50 electives

Restricted Electives for the Marketing Management Major

Substitutions for restricted electives will be allowed if a Marketing and Consumer Studies Faculty Advisor agrees that a proposed alternative is relevant to marketing in today's world and has an appropriate level of rigor.

Marketing Environment Elective - List E1

To supplement the knowledge students gain in MCS*1000 about the socio-cultural, economic, political/legal, and technological "environmental" factors that must be taken into consideration in marketing decision-making, marketing management majors must take one [0.50 credits] of:

ANTH*1150 [0.50] Introduction to Anthropology
EDRD*1400 [0.50] Introduction to Design
FRHD*1010 [0.50] Human Development
GEOG*1200 [0.50] Society and Space
GEOG*1220 [0.50] Human Impact on the Environment
GEOG*2510 [0.50] Canada: A Regional Synthesis
NUTR*1010 [0.50] Introduction to Nutrition
PHIL*2070 [0.50] Philosophy of the Environment
POLS*1400 [0.50] Issues in Canadian Politics
POLS*2250 [0.50] Public Administration and Governance
POLS*2300 [0.50] Canadian Government and Politics
SOC*1100 [0.50] Sociology

History/Global Elective - List E2

To help marketing majors develop a sense of the fundamental relativity of knowledge and understanding over time and to help them gain the global perspective needed in senior marketing courses, marketing management majors must take one [0.50 credits] of:

ARTH*2490 [0.50] History of Canadian Art
BIOL*1500 [0.50] Humans in the Natural World
GEOG*2030 [0.50] Environment and Development
HIST*1150 [0.50] The Modern World
HIST*1250 [0.50] Science and Technology in a Global Context
HIST*2070 [0.50] World Religions
HIST*2250 [0.50] Environment and History
HIST*2300 [0.50] The United States Since 1776

HIST*2510 [0.50] Modern Europe Since 1789
HIST*2910 [0.50] Modern Asia
HIST*2930 [0.50] Women and Cultural Change
HIST*3070 [0.50] Modern India
HIST*3150 [0.50] History and Culture of Mexico
ISS*2000 [0.50] Asia
POLS*1500 [0.50] World Politics
POLS*2080 [0.50] Development and Underdevelopment
POLS*2200 [0.50] International Relations

Leadership/Professionalism Elective - List E3

To help prepare senior marketing management majors for leadership positions in organizations, they must take one [0.50 credits] of:

ECON*2310 [0.50] Intermediate Microeconomics
ECON*2410 [0.50] Intermediate Macroeconomics
EDRD*3160 [0.50] International Communication
EDRD*4120 [0.50] Leadership Development in Small Organizations
HROB*2010 [0.50] Foundations of Leadership
MGMT*4260 [0.50] International Business
PHIL*2100 [0.50] Critical Thinking
PHIL*2120 [0.50] Ethics
PHIL*2600 [0.50] Business and Professional Ethics

Advanced Marketing Elective - List E4

To address the University Learning Objective of “Depth and Breadth of Learning” and to enhance the knowledge of product development, placement strategies, and the integration of societal influences on thinking, senior marketing management majors must take one [0.5 credits] of:

MC*3010 [0.50] Quality Management
MSC*4020 [0.50] Research in Consumer Studies
MSC*4040 [0.50] Management in Product Development
MSC*4060 [0.50] Retail Management
MSC*4300 [0.50] Marketing and Society
MSC*4400 [0.50] Pricing Management
MSC*4910 [0.50] Topics in Consumer Studies
MGMT*4350 [0.50] Business Case Competition Preparation

Experiential Learning Capstone Electives - List E5

To enhance their understanding of marketing in terms of application, senior marketing management majors must take one [0.50 credits] of:

HROB*4010 [0.50] Leadership Certificate Capstone
MSC*4100 [0.50] Entrepreneurship
MSC*4900 [0.50] Topics in Consumer Studies
MSC*4950 [0.50] Consumer Studies Practicum
MGMT*4020 [0.50] Interdisciplinary Food Product Development I
MGMT*4030 [0.50] Interdisciplinary Food Product Development II
MGMT*4050 [0.50] Business Consulting
MGMT*4060 [0.50] Business Consulting

Public Management (PMGT)

Department of Economics and Finance, Gordon S. Lang School of Business and Economic

The Public Management program is designed to lead to an understanding of public sector administration and management from the "inside" - as an integrated enterprise - as well as from the outside - as a series of policy decisions and outcomes. Characterized by a multi-disciplinary approach employing political, economic and business-oriented analysis, students will confront questions of why politicians and public servants behave the way they do, and how their policy choices and processes can be optimized. Management of public entities features a unique set of challenges that arise from and interact with basic political issues like democracy, accountability, equity, fairness, and justice. At the same time it necessarily faces concerns common to all organizations, such as efficiency, human and capital resource management, morale, planning, and adaptation to change.

The program will appeal to students interested in the public service, public sector businesses or business-government relations.

Students enrolled in the PMGT major can choose to complete three of the five required courses for the Certificate in Leadership as part of their requirements for the program if they choose the appropriate restricted electives. If you would like to graduate both with a BComm degree and the Certificate in Leadership you should use two of your free courses for the Certificate in Leadership as part of their requirements for the program if you choose the appropriate restricted electives. If you would like to graduate both with a BComm degree and the Certificate in Leadership you should use two of your free electives to enroll in HROB*4010 in either semester 3 or 6 and HROB*4010 in semester 8. In addition to the five degree-credit courses selected from the above list, 120 hours of leadership practice are required to obtain the undergraduate Certificate in Leadership. See http://www.leadershipcertificate.com/ for information regarding this Certificate and its course requirements.

Degree Requirements (20.00 Total Credits)

12.50 - Required Core Courses
4.50 - Restricted Electives (from lists)
0.00 – MGMT*1100 (Business Career Preparation)
1.50 - Liberal Education Electives

X. Degree Programs, Bachelor of Commerce (B.Com.)

Last Revision: July 4, 2019
1.50 - Free Electives

Major

Semester 1
ECON*1050 [0.50] Introductory Microeconomics
MCS*1000 [0.50] Introductory Marketing
MGMT*1000 [1.00] Introduction to Business
POLS*1400 [0.50] Issues in Canadian Politics

Semester 2
ECON*1100 [0.50] Introductory Macroeconomics
HROB*2090 [0.50] Individuals and Groups in Organizations
MATH*1030 [0.50] Business Mathematics
POLS*2300 [0.50] Canadian Government and Politics
0.50 electives

Semester 3
ACCT*1220 [0.50] Introductory Financial Accounting
ECON*2310 [0.50] Intermediate Microeconomics
ECON*2740 [0.50] Economic Statistics
POLS*3250 [0.50] Public Policy: Challenges and Prospects
One of:
  ECON*2100 [0.50] Economic Growth and Environmental Quality
  ECON*2650 [0.50] Introductory Development Economics
  ECON*2720 [0.50] Business History

Semester 4
ACCT*2230 [0.50] Management Accounting
ECON*2410 [0.50] Intermediate Macroeconomics
MGMT*1100 [0.00] Business Career Preparation
POLS*2250 [0.50] Public Administration and Governance
One of:
  PHIL*2120 [0.50] Ethics
  PHIL*2600 [0.50] Business and Professional Ethics
  PHIL*3040 [0.50] Philosophy of Law *
0.50 electives

Semester 5
ECON*2560 [0.50] Introduction to Finance
FARE*3310 [0.50] Operations Management
MGMT*3320 [0.50] Financial Management
One of:
  MCS*3040 [0.50] Business and Consumer Law
  REAL*4840 [0.50] Housing and Real Estate Law
0.50 electives

Semester 6
ECON*3610 [0.50] Public Economics
MCS*2020 [0.50] Information Management
One of:
  ECON*3300 [0.50] Economics of Health and the Workplace
  ECON*3400 [0.50] The Economics of Personnel Management
  ECON*3520 [0.50] Labour Economics
  ECON*3580 [0.50] Economics of Regulation
  ECON*3620 [0.50] International Trade
  ECON*3730 [0.50] The Origins of International Inequality
One of:
  POLS*3210 [0.50] The Constitution and Canadian Federalism
  POLS*3130 [0.50] Law, Politics and Judicial Process
  POLS*3270 [0.50] Local Government in Ontario
  POLS*3670 [0.50] Comparative Public Policy and Administration
0.50 electives

Semester 7
MGMT*3020 [0.50] Corporate Social Responsibility
POLS*3470 [0.50] Business-Government Relations in Canada
One of:
  ECON*3300 [0.50] Economics of Health and the Workplace
  ECON*3400 [0.50] The Economics of Personnel Management
  ECON*3520 [0.50] Labour Economics
  ECON*3580 [0.50] Economics of Regulation
  ECON*3620 [0.50] International Trade
  ECON*3730 [0.50] The Origins of International Inequality
One of:
  POLS*4160 [1.00] Multi-Level Governance in Canada
  POLS*4250 [1.00] Topics in Public Management
  POLS*4270 [0.50] Advanced Lecture in Public Management
  POLS*4970 [0.50] Honours Political Science Research I
0.50 credits at the 3000 or 4000 level in Economics or Political Science
0.50 electives

Semester 8
ECON*4400 [0.50] Managerial Economics
MGMT*4000 [0.50] Strategic Management
One of **:
  POLS*4160 [1.00] Multi-Level Governance in Canada
  POLS*4250 [1.00] Topics in Public Management
  POLS*4980 [0.50] Honours Political Science Research II
0.50 credits at the 4000 level in Economics
One of:
  POLS*3130 [0.50] Law, Politics and Judicial Process
  POLS*3270 [0.50] Local Government in Ontario
  POLS*3670 [0.50] Comparative Public Policy and Administration
0.50 electives***

** If a 1.00 credit POLS is taken in either semester 7 or 8 this will meet the restricted elective requirement for both semesters POLS*4250 is recommended

*** The number of electives will change if a 1.00 credit POLS course is taken in semester 7 or 8

Public Management (Co-op) (PMGT/C)

Department of Economics and Finance, Gordon S. Lang School of Business and Economics

The Public Management program is designed to lead to an understanding of public sector administration and management from the “inside” - as an integrated enterprise - as well as from the outside - as a series of policy decisions and outcomes. Characterized by a multi-disciplinary approach employing political, economic and business-oriented analysis, students will confront questions of why politicians and public servants behave the way they do, and how their policy choices and processes can be optimized. Management of public entities features a unique set of challenges that arise from and interact with basic political issues like democracy, accountability, equity, fairness, and justice. At the same time it necessarily faces concerns common to all organizations, such as efficiency, human and capital resource management, morale, planning, and adaptation to change.

The program will appeal to students interested in the public service, public sector businesses or business-government relations.

Students enrolled in the PMGT major can choose to complete three of the five required courses for the Certificate in Leadership as part of their requirements for the program if they choose the appropriate restricted electives. If you would like to graduate both with a BComm degree and the Certificate in Leadership you should use two of your free electives to enroll in HROB*2100 in either semester 3 or 6 and HROB*4010 in semester 8. In addition to the five degree-credit courses selected from the above list, 120 hours of leadership practice are required to obtain the undergraduate Certificate in Leadership. See http://www.leadertshipcertificate.com/ for information regarding this Certificate and its course requirements.

A principal aim of the Co-op program in Public Management is to facilitate the transition of students from academic studies to a professional career by enhancing the integration of theory and practice.

Program Requirements

The Co-op program in Public Management is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Public Management Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1000 Work Term I</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>COOP*4000 Work Term IV</td>
<td>COOP*5000 Work Term V</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education website.

Credit Summary (22.00 Total Credits)*

12.50 - Required Core Courses
4.50 - Restricted Electives (from lists)

* This course may be offered in the fall and can be taken later in the program.
** This course may be offered in the fall and can be taken later in the program.
*** This course may be offered in the fall and can be taken later in the program.
1.50 - Liberal Education Electives
2.00 Co-op Work Terms

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed the total number of credits will equal 22.50.

The recommended program sequence is outlined below.

Major

Semester 1
ECON*1050 [0.50] Introductory Microeconomics
MCS*1000 [0.50] Introductory Marketing
MGMT*1000 [1.00] Introduction to Business
POL*1400 [0.50] Issues in Canadian Politics

Semester 2
ECON*1100 [0.50] Introductory Macroeconomics
HR*1020 [0.50] Individuals and Groups in Organizations
MATH*1030 [0.50] Business Mathematics
POL*2300 [0.50] Canadian Government and Politics
0.50 elective

Semester 3
ACCT*1220 [0.50] Introductory Financial Accounting
COOP*1100 [0.00] Introduction to Co-operative Education
ECON*2310 [0.50] Intermediate Microeconomics
ECON*2740 [0.50] Economic Statistics
POL*3250 [0.50] Public Policy: Challenges and Prospects
One of:
ECON*2100 [0.50] Economic Growth and Environmental Quality
ECON*2650 [0.50] Introductory Development Economics
ECON*2720 [0.50] Business History

Semester 4 - Winter
ACCT*2230 [0.50] Management Accounting
ECON*2410 [0.50] Intermediate Macroeconomics
ECON*2560 [0.50] Introduction to Finance
POL*2250 [0.50] Public Administration and Governance
0.50 electives

Summer Semester
COOP*1900 [0.50] Co-op Work Term I

Fall Semester
COOP*2100 [0.50] Co-op Work Term II

Semester 5 - Winter
ECON*3610 [0.50] Public Economics
FARE*3310 [0.50] Operations Management
MCS*2020 [0.50] Information Management
MGMT*3320 [0.50] Financial Management
One of:
PHIL*2120 [0.50] Ethics
PHIL*2600 [0.50] Business and Professional Ethics
PHIL*3040 [0.50] Philosophy of Law
* This course may be offered in the fall and can be taken later in the program.

Summer Semester
COOP*3000 [0.50] Co-op Work Term III

Semester 6 - Fall
MGMT*3020 [0.50] Corporate Social Responsibility
POL*3470 [0.50] Business-Government Relations in Canada
One of:
ECON*3300 [0.50] Economics of Health and the Workplace
ECON*3400 [0.50] The Economics of Personnel Management
ECON*3520 [0.50] Labour Economics
ECON*3580 [0.50] Economics of Regulation
ECON*3620 [0.50] International Trade
ECON*3730 [0.50] The Origins of International Inequality
One of:
MCS*3040 [0.50] Business and Consumer Law
REAL*4840 [0.50] Housing and Real Estate Law
0.50 electives

Winter Semester
COOP*4000 [0.50] Co-op Work Term IV
(Eight month work term in conjunction with COOP*5000)

Summer Semester
COOP*5000 [0.50] Co-op Work Term V
(Eight month work term in conjunction with COOP*4000)

Semester 7 - Fall
MGMT*4000 [0.50] Strategic Management
One of:
ECON*3300 [0.50] Economics of Health and the Workplace
ECON*3400 [0.50] The Economics of Personnel Management
ECON*3520 [0.50] Labour Economics
ECON*3580 [0.50] Economics of Regulation
ECON*3620 [0.50] International Trade
ECON*3730 [0.50] The Origins of International Inequality
One of **:
POLS*4160 [1.00] Multi-Level Governance in Canada
POLS*4250 [1.00] Advanced Lecture in Public Management
POLS*4270 [0.50] Advanced Lecture in Public Management
POLS*4970 [0.50] Honours Political Science Research I
0.50 credits at the 3000 or 4000 level in Economics or 4000 level in Political Science
1.00 electives***

Semester 8 - Winter
ECON*4100 [0.50] Managerial Economics
Two of:
POLS*3130 [0.50] Law, Politics and Judicial Process
POLS*3210 [0.50] The Constitution and Canadian Federalism
POLS*3270 [0.50] Local Government in Ontario
POLS*3670 [0.50] Comparative Public Policy and Administration
One of **:
POLS*4160 [1.00] Multi-Level Governance in Canada
POLS*4250 [1.00] Topics in Public Management
POLS*4980 [0.50] Honours Political Science Research II
0.50 credits at the 4000 level in Economics
0.50 electives***

** If a 1.00 credit POLS is taken in either semester 7 or 8 this will meet the restricted elective requirement for both semesters POLS*4250 is recommended

*** The number of electives will change if a 1.00 credit POLS course is taken in semester 7 or 8

Real Estate and Housing (REH)

Department of Marketing and Consumer Studies, Gordon S. Lang School of Business and Economics

The Real Estate and Housing major in the B.Comm. program is one of only a few undergraduate programs in Canada that specialize in the real estate sector. It takes a multi-disciplinary approach to the study of residential and commercial/investment real estate. Topics such as the development, financing, valuation, market analysis and management of real estate are taught in the context of economic, legal, political and social factors affecting this large and growing field of business in Canada and the world.

The purpose of this major is to develop the conceptual, analytical and management skills required for careers in real estate and housing. Students graduate with a degree that can lead to a variety of professional positions in the private or public sectors of the Canadian real estate industry or they can continue on to graduate work in business, planning or the social sciences.

Elective options enable students to select courses which support or complement their primary field of study. Examples: (1) students can use Liberal Education and free electives to earn the Certificate in Leadership. See http://www.leadershipcerificate.com/ for information regarding this Certificate and its course requirements; (2) students interested in languages and/or going on exchange can use their Liberal Education and free electives to study one or more of the various languages taught at the University. (3) Students interested in obtaining their Accredited Appraiser Canadian Institute (AACC) designation should consider taking some of the additional 4 required courses through University of British Columbia distance education by letter of permission to count as electives in their degree, once they have completed REAL*4820.

Students may consult the REH Faculty Advisor or B.Comm. Program Counsellor for additional information.

Degree Requirements (20.00 Total Credits)
16.00 - Required Core Courses
0.00 – MGMT*1100 (Business Career Preparation)
1.50 - Liberal Education Electives
2.50 - Free Electives

Major

Semester 1
ECON*1050 [0.50] Introductory Microeconomics
REAL*1820 [0.50] Real Estate and Housing
MGMT*1000 [1.00] Introduction to Business
0.50 electives

Semester 2
ACCT*1220 [0.50] Introductory Financial Accounting
Real Estate and Housing Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Semester</th>
<th>Winter Semester</th>
<th>Summer Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>COOP*4000 Work Term IV</td>
<td>COOP*5000 Work Term V</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (22.00 Total Credits)*

- 16.00 - Required Core Courses
- 1.50 - Liberal Education Electives
- 2.50 - Free Electives
- 2.00 Co-op Work Terms

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed the total number of credits will equal 22.50.

The recommended program sequence is outlined below.

Major

Semester 1 - Fall
- ECON*1050 [0.50] Introductory Microeconomics
- REAL*1820 [0.50] Real Estate and Housing
- MGMT*1000 [1.00] Introduction to Business
- 0.50 electives

Semester 2 - Winter
- ACCT*1220 [0.50] Introductory Financial Accounting
- ECON*1100 [0.50] Introductory Macroeconomics
- MCS*1000 [0.50] Introductory Marketing
- MATH*1030 [0.50] Business Mathematics
- 0.50 electives

Semester 3 - Fall
- ACCT*2230 [0.50] Management Accounting
- COOP*1100 [0.50] Introduction to Co-operative Education
- ECON*2310 [0.50] Intermediate Microeconomics
- REAL*2850 [0.50] Service Learning in Housing
- One of:
  - ECON*2740 [0.50] Economic Statistics
  - STAT*2060 [0.50] Statistics for Business Decisions
- 0.50 electives

Semester 4 - Winter
- ECON*2410 [0.50] Intermediate Macroeconomics
- FARE*3310 [0.50] Operations Management
- REAL*4820 [0.50] Real Estate Appraisal
- REAL*4840 [0.50] Housing and Real Estate Law
- 0.50 electives

Semester 5 - Winter
- ECON*3960 [0.50] Money, Credit and the Financial System
- LARC*2820 [0.50] Urban and Regional Planning
- MGMT*3020 [0.50] Corporate Social Responsibility
- MGMT*3320 [0.50] Financial Management
- REAL*3890 [0.50] Property Management
- 0.50 electives

Semester 6 - Fall
- ECON*3500 [0.50] Urban Economics
- MGMT*4000 [0.50] Strategic Management
- REAL*3810 [0.50] Real Estate Market Analysis
- REAL*4870 [0.50] Sustainable Real Estate
- 0.50 electives

Semester 7 - Winter
- POLS*3270 [0.50] Local Government in Ontario
- REAL*4830 [1.00] Real Estate Development Project
- 1.00 electives

Semester 8 - Winter
- ECON*4100 [0.50] Corporate Social Responsibility
- MGMT*3020 [0.50] Financial Management
- REAL*4820 [0.50] Real Estate Appraisal
- REAL*4840 [0.50] Housing and Real Estate Law
- 0.50 electives

Real Estate and Housing (Co-op) (REH:C)

Department of Marketing and Consumer Studies, Gordon S. Lang School of Business and Economics

The Real Estate and Housing major is for students who wish to develop the conceptual, analytical and management skills required for the real estate sector. This program is designed to provide students with the skills necessary to succeed in a variety of positions in the private or public sectors of the Canadian real estate industry or to continue on to graduate work in business, planning or the social sciences.

Elective options enable students to select courses which support or complement their primary field of study. Examples: (1) students can use Liberal Education and free electives to earn the Certificate in Leadership. See http://www.leadershipcertificate.ca/ for information regarding this Certificate and its course requirements; (2) students interested in languages and/or going on exchange can use their Liberal Education and free electives to study one or more of the various languages taught at the University. (3) Students interested in obtaining their Accredited Appraiser Canadian Institute (AACI) designation should consider taking some of the additional four required courses through University of British Columbia distance education by letter of permission to count as electives in their degree, once they have completed REAL*4820.

A principal aim of the Co-op program in Real Estate and Housing is to facilitate the transition of students from academic studies to a professional career by enhancing the integration of theory and practice.

Program Requirements

The Co-op program in Real Estate and Housing is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*4000</td>
<td>Co-op Work Term IV</td>
<td>[0.50]</td>
</tr>
<tr>
<td></td>
<td>(Eight month work term in conjunction with COOP*5000)</td>
<td></td>
</tr>
<tr>
<td>COOP*5000</td>
<td>Co-op Work Term V</td>
<td>[0.50]</td>
</tr>
<tr>
<td></td>
<td>(Eight month work term in conjunction with COOP*4000)</td>
<td></td>
</tr>
<tr>
<td>ECON*3500</td>
<td>Urban Economics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MGMT*4000</td>
<td>Strategic Management</td>
<td>[0.50]</td>
</tr>
<tr>
<td>REAL*3810</td>
<td>Real Estate Market Analysis</td>
<td>[0.50]</td>
</tr>
<tr>
<td>REAL*4870</td>
<td>Sustainable Real Estate</td>
<td>[0.50]</td>
</tr>
<tr>
<td>LARC*2820</td>
<td>Urban and Regional Planning</td>
<td>[0.50]</td>
</tr>
<tr>
<td>POLS*3270</td>
<td>Local Government in Ontario</td>
<td>[0.50]</td>
</tr>
<tr>
<td>REAL*4830</td>
<td>Real Estate Development Project</td>
<td>[1.00]</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2019-2020 Undergraduate Calendar

Last Revision: July 4, 2019
Bachelor of Computing (B.Comp.)

Students graduating from this program obtain a solid foundation in the theory and application of all aspects of computing and information science. Core subjects, combined with in-depth study in an area of application, give students the freedom to combine their interests in computing with other areas of study and application.

There are two majors available in the Bachelor of Computing honors program. The major in Computer Science provides a traditional computing foundation in software, hardware, and theory. The major in Software Engineering contains an emphasis on software development and design and has a greater focus on team work, communication skills, and professional standards.

Course projects are based on real-world software development scenarios and allow students to get the professional experience valued by today’s high-tech employers. The focused study in a second discipline (area of application) gives students the background to effectively apply their knowledge.

Both majors require the equivalent of 8 semesters of successful full-time study. The general program requires the equivalent of 6 semesters of successful full-time study are available. Students in the honors program must choose a major in either Computer Science or Software Engineering. The majors are also available with a Co-op option.

Since not all courses are offered in every semester and prerequisite dependencies must be observed, students are encouraged to consult the program B.Comp. counsellor to plan an initial program of study or when considering modifications to the suggested schedule of studies list.

Program Information

To graduate with an honors Degree with a major in Computer Science or Software Engineering a student must:

a. Successfully complete 20.00 credits. These must include the 11.25 CIS credits, a minimum of 4.00 credits in an Area of Application and an additional 4.75 credits as free electives. Not more than 6.00 credits from courses at the introductory (1000) level may be counted towards the 20.00 credit requirement.

The program requires 6.00 Computing and Information Science credits at the 3000 level or above, which must include 2.00 credits at the 4000 level. The area of application requires an additional 1.00 credits at the 3000 level or above. The Area of Application is a graduation requirement and must be approved by Semester 4 by the faculty advisor.

b. Obtain a cumulative average at least 70% in CIS courses and a 60% cumulative average in all courses.

c. An Area of Application normally consists of 4.00 credits (normally 8 courses) of a minor. Minors are described under the B.A. and B.Sc. programs. Access to some courses may be limited. Minors are listed in Section X of the Calendar. A student must complete a minor should they decide to do so.

Students must consult the faculty advisor for approval of their Area of Application by semester 4. Not all disciplines or courses may be available as areas of application.

Students failing to meet the graduation requirements of the honors program may apply to graduate with a general degree if the requirements for the general degree are met.

Continuation of Study

Students are advised to consult the regulations for Continuation of Study which are outlined in detail in Section VIII Degree Regulations Procedures of this calendar.

General Program

School of Computer Science, College of Engineering and Physical Sciences

To graduate from a general program a student must:

a. Earn 15.00 credits. These must include courses that fulfill the distribution requirements of the general Degree (see below). At least 4.00 credits must be at the 3000 level or above. Not more than 6.00 credits at the introductory (1000) level may be counted towards the 15.00 credit requirement.

b. No more than 11.00 credits in any one subject or discipline, as indicated by the course prefix code, can be counted towards a general degree.

c. Successfully complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*1300</td>
<td>0.50</td>
<td>Programming</td>
</tr>
<tr>
<td>CIS*1910</td>
<td>0.50</td>
<td>Discrete Structures in Computing I</td>
</tr>
<tr>
<td>CIS*2430</td>
<td>0.50</td>
<td>Object Oriented Programming</td>
</tr>
<tr>
<td>CIS*2500</td>
<td>0.50</td>
<td>Intermediate Programming</td>
</tr>
<tr>
<td>CIS*2520</td>
<td>0.50</td>
<td>Data Structures</td>
</tr>
<tr>
<td>CIS*2750</td>
<td>0.75</td>
<td>Software Systems Development and Integration</td>
</tr>
<tr>
<td>CIS*2910</td>
<td>0.50</td>
<td>Discrete Structures in Computing II</td>
</tr>
<tr>
<td>CIS*3530</td>
<td>0.50</td>
<td>Data Base Systems and Concepts</td>
</tr>
<tr>
<td>0.50 additional CIS or STAT credits at the 2000 level or higher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.00 additional CIS credits at 3000 level or higher</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

d. Earn 2.00 science credits (list of courses available in the Program Counsellor's office) and 2.00 credits in the College of Arts or College of Social and Applied Human Sciences in addition to the courses listed in c.

Computer Science (CS)

School of Computer Science, College of Engineering and Physical Sciences

Major (Honours Program)

Since many courses are offered in only one semester and course pre-requisites place an ordering on courses, the following program of studies is designed so that students can schedule their courses over 8 semesters of study. Students deviating from this schedule must consult with their academic advisor.

Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*1300</td>
<td>0.50</td>
<td>Programming</td>
</tr>
<tr>
<td>CIS*1910</td>
<td>0.50</td>
<td>Discrete Structures in Computing I</td>
</tr>
<tr>
<td>MATH*1200</td>
<td>0.50</td>
<td>Calculus I</td>
</tr>
<tr>
<td>1.00 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*2500</td>
<td>0.50</td>
<td>Intermediate Programming</td>
</tr>
<tr>
<td>CIS*2910</td>
<td>0.50</td>
<td>Discrete Structures in Computing II</td>
</tr>
<tr>
<td>MATH*1160</td>
<td>0.50</td>
<td>Linear Algebra I</td>
</tr>
<tr>
<td>1.00 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*2030</td>
<td>0.50</td>
<td>Structure and Application of Microcomputers</td>
</tr>
<tr>
<td>CIS*2430</td>
<td>0.50</td>
<td>Object Oriented Programming</td>
</tr>
<tr>
<td>CIS*2520</td>
<td>0.50</td>
<td>Data Structures</td>
</tr>
<tr>
<td>1.00 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*2750</td>
<td>0.75</td>
<td>Software Systems Development and Integration</td>
</tr>
<tr>
<td>CIS*3110</td>
<td>0.50</td>
<td>Operating Systems I</td>
</tr>
<tr>
<td>CIS*3490</td>
<td>0.50</td>
<td>The Analysis and Design of Computer Algorithms</td>
</tr>
<tr>
<td>0.75 credits in the Area of Application or elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 5

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*3150</td>
<td>0.50</td>
<td>Theory of Computation</td>
</tr>
<tr>
<td>CIS*3750</td>
<td>0.75</td>
<td>System Analysis and Design in Applications</td>
</tr>
<tr>
<td>STAT*2040</td>
<td>0.50</td>
<td>Statistics I</td>
</tr>
<tr>
<td>0.75 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*3760</td>
<td>0.75</td>
<td>Software Engineering</td>
</tr>
<tr>
<td>0.50 CIS electives at the 3000 level or above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.25 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 7

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.50 credits in CIS at 3000 level or above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.00 credits in CIS at the 4000 level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 8

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*4650</td>
<td>0.50</td>
<td>Compilers</td>
</tr>
<tr>
<td>1.00 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.50 credits in CIS at the 3000 level or above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.50 credits in CIS at the 4000 level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Computer Science (Co-op) (CS:C)

Computing and Information Science, College of Engineering and Physical Sciences

Program Requirements

The Co-op program in Computer Science is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Computer Science Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>Academic Semester 4</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>COOP*4000 Work Term IV</td>
<td>COOP*5000 Work Term V</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.
For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site. Students are advised to plan their schedule of studies well in advance so that they can take all required prerequisites for later (especially 4000 level) courses. Students should note that some 4000 level courses are only given in alternate years. Failure to plan may result in the inability to take a particular senior CIS course. Not all sequences may be viable. Please check with the CIS Co-op faculty advisor for semester planning.

Credit Summary (22.00 Total Credits)*

<table>
<thead>
<tr>
<th>Semester 1 - Fall</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*1300 [0.50]</td>
<td>Programming</td>
<td></td>
</tr>
<tr>
<td>CIS*1910 [0.50]</td>
<td>Discrete Structures in Computing I</td>
<td></td>
</tr>
<tr>
<td>MATH*1200 [0.50]</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>1.00 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2 - Winter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*2500 [0.50]</td>
<td>Intermediate Programming</td>
<td></td>
</tr>
<tr>
<td>CIS*2910 [0.50]</td>
<td>Discrete Structures in Computing II</td>
<td></td>
</tr>
<tr>
<td>MATH*1160 [0.50]</td>
<td>Linear Algebra I</td>
<td></td>
</tr>
<tr>
<td>1.00 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer Semester - Off</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*2030 [0.50]</td>
<td>Structure and Application of Microcomputers</td>
<td></td>
</tr>
<tr>
<td>CIS*2430 [0.50]</td>
<td>Object Oriented Programming</td>
<td></td>
</tr>
<tr>
<td>CIS*2520 [0.50]</td>
<td>Data Structures</td>
<td></td>
</tr>
<tr>
<td>COOP*1100 [0.00]</td>
<td>Introduction to Co-operative Education</td>
<td></td>
</tr>
<tr>
<td>1.00 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 4 - Winter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*2750 [0.75]</td>
<td>Software Systems Development and Integration</td>
<td></td>
</tr>
<tr>
<td>CIS*3110 [0.50]</td>
<td>Operating Systems I</td>
<td></td>
</tr>
<tr>
<td>CIS*3490 [0.50]</td>
<td>The Analysis and Design of Computer Algorithms</td>
<td></td>
</tr>
<tr>
<td>0.75 credits in the Area of Application or elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer Semester</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*1000 Work Term 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*2000 Work Term 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 5 - Winter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*3150 [0.50]</td>
<td>Theory of Computation</td>
<td></td>
</tr>
<tr>
<td>CIS*3760 [0.75]</td>
<td>Software Engineering</td>
<td></td>
</tr>
<tr>
<td>STAT*2040 [0.50]</td>
<td>Statistics I</td>
<td></td>
</tr>
<tr>
<td>0.75 credits in the Area of Application or elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Semester</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*4000 Work Term 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer Semester</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*5000 Work Term 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 6 - Fall</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*3750 [0.75]</td>
<td>Software Design I</td>
<td></td>
</tr>
<tr>
<td>CIS*3940 [0.50]</td>
<td>Software Design II</td>
<td></td>
</tr>
<tr>
<td>CIS*4150 [0.50]</td>
<td>Software Design III</td>
<td></td>
</tr>
<tr>
<td>0.50 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 7</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*3260 [0.50]</td>
<td>Software Design IV</td>
<td></td>
</tr>
<tr>
<td>CIS*4150 [0.50]</td>
<td>Software Reliability and Testing</td>
<td></td>
</tr>
<tr>
<td>CIS*4300 [0.50]</td>
<td>Human Computer Interaction</td>
<td></td>
</tr>
<tr>
<td>1.00 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 8</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*4250 [0.50]</td>
<td>Software Design V</td>
<td></td>
</tr>
<tr>
<td>1.50 credits in the Area of Application or electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 9</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*4300 [0.50]</td>
<td>Software Design VI</td>
<td></td>
</tr>
<tr>
<td>0.50 credits in CIS at the 4000 level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Software Engineering (Co-op) (SENG:C)

Computing and Information Science, College of Engineering and Physical Sciences

Program Requirements

The Co-op program in Software Engineering is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Credit Summary (22.00 Total Credits)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>COOP*4000 Work Term IV</td>
<td>COOP*5000 Work Term V</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.
For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site. Students are advised to plan their schedule of studies well in advance so that they can take all required prerequisites for later (especially 4000 level) courses. Students should note that some 4000 level courses are only given in alternate years. Failure to plan may result in the inability to take a particular senior CIS course. Not all sequences may be viable. Please check with the CIS Co-op faculty advisor for semester planning.

**Credit Summary (22.00 Total Credits)**

- 12.25 - Required Core Courses
- 4.00 – Area of Application
- 3.75 – Free electives
- 2.00 - Co-op Work Terms

**Note:** A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed the total number of credits will equal 22.50.

The recommended program sequence is outlined below.

**Major (Honours Program) Co-op**

The recommended schedule of studies for Co-op is as follows:

**Semester 1 - Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*1250</td>
<td>0.50</td>
</tr>
<tr>
<td>CIS*1300</td>
<td>0.50</td>
</tr>
<tr>
<td>CIS*1910</td>
<td>0.50</td>
</tr>
</tbody>
</table>

1.00 credits in the Area of Application or electives

**Semester 2 - Winter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*2250</td>
<td>0.50</td>
</tr>
<tr>
<td>CIS*2500</td>
<td>0.50</td>
</tr>
<tr>
<td>MATH*1160</td>
<td>0.50</td>
</tr>
</tbody>
</table>

1.00 credits in the Area of Application or electives

**Summer Semester - Off**

**Semester 3 - Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*2030</td>
<td>0.50</td>
</tr>
<tr>
<td>CIS*2430</td>
<td>0.50</td>
</tr>
<tr>
<td>CIS*2520</td>
<td>0.50</td>
</tr>
<tr>
<td>CIS*3250</td>
<td>0.50</td>
</tr>
<tr>
<td>COOP*1100</td>
<td>0.00</td>
</tr>
</tbody>
</table>

0.50 credits in the Area of Application or electives

**Semester 4 - Winter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*2750</td>
<td>0.75</td>
</tr>
<tr>
<td>CIS*3110</td>
<td>0.50</td>
</tr>
<tr>
<td>CIS*3490</td>
<td>0.50</td>
</tr>
</tbody>
</table>

0.75 credits in the Area of Application or elective

**Summer Semester**

COOP*1000 Work Term 1

**Fall Semester**

COOP*2000 Work Term 2

**Semester 5 - Winter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*3750</td>
<td>0.75</td>
</tr>
</tbody>
</table>

0.50 CIS electives at the 3000 level or above

1.25 credits in the Area of Application or electives

**Summer Semester**

COOP*3000 Work Term 3

**Semester 6 - Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*3760</td>
<td>0.75</td>
</tr>
<tr>
<td>STAT*2040</td>
<td>0.50</td>
</tr>
</tbody>
</table>

0.50 credits in CIS at 3000 level or above

0.75 credits in the Area of Application or elective

**Winter Semester**

COOP*4000 Work Term 4

**Summer Semester**

COOP*5000 Work Term 5

**Semester 7 - Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*3260</td>
<td>0.50</td>
</tr>
<tr>
<td>CIS*4150</td>
<td>0.50</td>
</tr>
<tr>
<td>CIS*4300</td>
<td>0.50</td>
</tr>
</tbody>
</table>

1.00 credits in the Area of Application or electives

**Semester 8 - Winter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS*4250</td>
<td>0.50</td>
</tr>
</tbody>
</table>

1.50 credits in the Area of Application or electives

0.50 credits in CIS at the 4000 level

Last Revision: July 4, 2019
Bachelor of Engineering [B.Eng.]

Program Information

Objectives of the Program

Students in this program obtain a liberal engineering education, which includes a comprehensive core of science, mathematics and engineering science that provides a strong foundation for engineering design and analysis. This enables students to undertake the solution of engineering problems in the areas of biological, biomedical, computer, engineering systems and computing, environmental, mechanical and water resources. Core subjects, combined with elective opportunities, provide an understanding of the connection between engineering and science, coupled with the interdisciplinary skills needed to address the problems and challenges faced by engineers in society today.

The curriculum includes a strong emphasis on engineering design. Students engage in engineering design throughout the program, and gain experience in computer aided design and modeling, conceptual design and physical construction. Emphasis is on teamwork and communications skills, as well as working on interdisciplinary projects.

Career opportunities are open in many segments of the economy. Examples are: consulting services to municipalities, utilities and industry; resource agencies in advisory, regulatory, planning and utilization; service industries of construction, power and water supply and public health; manufacturing, design of computer and control systems, hardware and software development; mechatronics and emerging energy systems; medical devices, pharmaceutical and food industries and industrial ergonomics; academic research and graduate studies within and without the field of engineering.

Many engineers assume management responsibilities after gaining experience in design, development and operations. The balance provided by liberal arts and engineering education allows graduates to enjoy a great deal of career mobility.

Accreditation

The baccalaureate degree programs in all engineering programs are accredited by the Canadian Engineering Accreditation Board of Engineers Canada. Graduates from accredited engineering programs have the educational requirements to apply for membership in the Professional Engineers Ontario (PEO) and other provinces after a number of years of acceptable engineering experience and successful completion of a PEO examination in engineering law and ethics.

Requirements of the Program

Students combine their required courses in mathematics, physical sciences and engineering with additional credits providing the opportunity for specialization in: one of the programs; complementary studies courses; and elective subjects. Complementary studies, consist of courses in the social sciences, arts, management, engineering economics and communication. They complement the technical content of the curriculum. All credits are selected according to the schedule of studies for the student's chosen program. Restrictions apply to the number of non-core credits which may be at the 1000 level. Further information on approved courses may be obtained from the B.Eng. Program Guide available from the director or program counsellor of the School of Engineering.

Programs

Entry into a specific B.Eng. program is done two ways. Students can select their desired program of study (major) at the time of application. If accepted, students will be given an offer to their program of choice. Students also have the option of selecting the Undeclared First Year (Undeclared Stream) entry point due to the similarities of first year. Students in the Undeclared Stream then normally select their specific program of study during course selection for Semester II. Students in the Undeclared stream are strongly encouraged to meet with their Program Counsellor during Semester I. The School's Associate Director - Undergraduate Affairs or designate approve program selection during the semester add periods. There are no enrollment caps on any program, so students are free to select their programs of choice. Students wanting to make a switch in majors after the above dates are free to do so with prior approval, but will be off sequence and may be required to take additional courses. The available programs are:

- Undeclared First Year: Students selecting this entry point are required to select one of the B.Eng. Majors at the time of course selection in Semester II.
- Biological Engineering - the application of engineering to the control and management of biological processes, environments, and human factors in engineering design.
- Biomedical Engineering - the application of engineering to health and medicine.
- Computer Engineering - the application of engineering to the design, fabrication, and testing of computing machines and computer systems.
- Engineering Systems and Computing - the application of engineering to the design, operation and management of data sensing, transmission and processing systems, and of control systems.
- Environmental Engineering - the application of engineering to protect and restore the environment, through the prevention and treatment of gaseous, liquid and solid wastes.
- Mechanical Engineering - The application of engineering to the design, manufacturing and control of mechanical and electro-mechanical equipment, systems and devices.

Water Resources Engineering - the application of engineering to the control and management of water and soil resources to meet human needs while sustaining the natural environment.

The schedule of studies for each program is provided below but guidance in the selection of appropriate courses is available from the program counsellor of the School of Engineering.

Additional Course Requirements

Students lacking specific subject requirements are advised to consult the Recommendations and Notes in Section IV—Admission Information—B.Eng.

Continuation of Study

Students are advised to consult the regulations for continuation of study within the program which are outlined in detail in Section VIII, Undergraduate Degree Regulation & Procedures. Students will be ineligible to continue in the B.Eng. program and will not be readmitted to the degree program if the same course is failed three times.

Normally, students in the B.Eng. program will be permitted only one supplemental privilege during their studies. It will usually be granted for 3000 or 4000 level courses only.

Conditions for Graduation

To qualify for the degree the student must complete the courses required for a B.Eng. program and must achieve an overall minimum cumulative average of at least 60% and a minimum cumulative average of at least 60% in all ENGG courses.

Co-operative Education

Students studying for the B.Eng. degree may participate in a Co-operative Education program following the completion of the first 4 semesters of study. The Co-operative Education program consists of a minimum of 4 semesters of experience in industry with employers who participate in the program. Reports and assignments are graded by a faculty supervisor with assistance from the employer. Evaluations of Co-op semesters are recorded on the student's academic record. The Co-operative Education program provides an excellent opportunity for students to obtain work experience in industry directly related to their field of study. Interested students should consult their program counsellor.

Students wishing to participate in the Co-operative Education program should indicate their intention to do so by applying for admission to the Co-op program on entrance. Following the completion of semester 2, in-course applicants will be considered for admission to the Co-op program if space permits.

Successful applicants will:

1. have a minimum cumulative average of 70% in semesters 1 and 2
2. have successfully completed all of the credits required in the schedule of studies for semesters 1 and 2
3. be employable in Canada or be in possession of an appropriate work-permit for Co-op students
4. have obtained the approval of their Co-op advisor in the school to participate in the program.

The Co-op advisor's approval will signify that the schedule of work semesters in the Co-op program as planned by the student is compatible with the schedule of studies in the program in which the student is enrolled.

5. completion of COOP*1100 is a requirement for entry into the first work term.

Please refer to Co-operative Education Program for Admission requirements into the Co-op Program.

B. Eng. Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Semester</th>
<th>Yr. 1</th>
<th>Yr. 2</th>
<th>Yr. 3</th>
<th>Yr. 4</th>
<th>Yr. 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>work</td>
</tr>
<tr>
<td>Winter</td>
<td>2</td>
<td>4</td>
<td>work</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Summer</td>
<td>work</td>
<td>work</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All candidates must complete a minimum of 4 of the preceding 5 work terms with at least one work-term in each of a Fall, Winter and Summer semester. Students are eligible to participate in a maximum of two (2) work terms commencing in the summer and must follow the academic work schedule as outlined in the Co-operative Education & Career Services website.

Undeclared First Year Entry - B.Eng. Program

School of Engineering, College of Engineering and Physical Sciences

Semester 1 - Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*1040</td>
<td>[0.50]</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>ENGG*1100</td>
<td>[0.75]</td>
<td>Engineering and Design I</td>
</tr>
<tr>
<td>MATH*1200</td>
<td>[0.50]</td>
<td>Calculus I</td>
</tr>
<tr>
<td>PHYS*1130</td>
<td>[0.50]</td>
<td>Physics with Applications</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS*1300</td>
<td>[0.50]</td>
<td>Programming</td>
</tr>
<tr>
<td>CIS*1500</td>
<td>[0.50]</td>
<td>Introduction to Programming</td>
</tr>
</tbody>
</table>

Note: Students planning to declare one of Computer Engineering or Engineering Systems and Computing should take CIS*1300. This course is required for progression into CIS*2500 in Semester 2.
Semester 2 - Winter
(for students planning to declare one of: Biological Engineering, Biomedical Engineering, Environmental Engineering, Water Resources Engineering)
CHEM*1050 0.50  General Chemistry II
ENGG*1210 0.50  Engineering Mechanics I
ENGG*1500 0.50  Engineering Analysis
MATH*1210 0.50  Calculus II
PHYS*1010 0.50  Introductory Electricity and Magnetism

Semester 2 - Winter
(for students planning to declare one of: Computer Engineering, Engineering Systems and Computing)
CIS*2500 0.50  Intermediate Programming
ENGG*1210 0.50  Engineering Mechanics I
ENGG*1500 0.50  Engineering Analysis
MATH*1210 0.50  Calculus II
PHYS*1010 0.50  Introductory Electricity and Magnetism

Semester 2 - Winter
(for students planning to declare Mechanical Engineering)
ENGG*1210 0.50  Engineering Mechanics I
ENGG*1500 0.50  Engineering Analysis
MATH*1210 0.50  Calculus II
PHYS*1010 0.50  Introductory Electricity and Magnetism
0.50 restricted electives

BIOE - Biological Engineering Program

School of Engineering, College of Engineering and Physical Sciences

Students interested in problems requiring the application of knowledge from both the biological sciences and engineering will find a challenge as a Biological Engineer. This field of engineering is the application of principles, methods and concepts of biology to systems and tools, ranging in scale from molecular to ecosystem level. This field combines engineering principles with life sciences to design creative solutions for biological systems, with applications ranging from pharmaceutical and food manufacturing, biocatalysis to reduce waste, and production of sustainable, bio-based materials. For example, a Biological Engineer concentrating on biotechnology might design and manage bioreactors to improve productivity. A Biological Engineering graduate can pursue a career in a number of exciting fields, including food safety, bio-instrumentation, diagnostics and sensors in bio-systems, biomechanics and ergonomics.

Major (Honours Program)

Semester 1
CHEM*1040 0.50  General Chemistry I
ENGG*1100 0.75  Engineering and Design I
ENGG*1500 0.50  Engineering Analysis
MATH*1200 0.50  Calculus I
PHYS*1130 0.50  Physics with Applications

Semester 2
CHEM*1050 0.50  General Chemistry II
CIS*1500 0.50  Introduction to Programming
ENGG*1210 0.50  Engineering Mechanics I
MATH*1210 0.50  Calculus II
PHYS*1010 0.50  Introductory Electricity and Magnetism

Semester 3
BIOL*1080 0.50  Biological Concepts of Health
ENGG*2230 0.50  Fluid Mechanics
ENGG*2400 0.50  Engineering Systems Analysis
MATH*2270 0.50  Applied Differential Equations
STAT*2120 0.50  Probability and Statistics for Engineers
One of:
BIOL*1070 0.50  Discovering Biodiversity
BIOL*1090 0.50  Introduction to Molecular and Cellular Biology

Semester 4
BIOC*2580 0.50  Introduction to Biochemistry
ENGG*2100 0.75  Engineering and Design II
ENGG*2120 0.50  Material Science
ENGG*2450 0.50  Electric Circuits
ENGG*2660 0.50  Biological Engineering Systems I
MATH*2130 0.50  Numerical Methods

Semester 5
ENGG*3160 0.50  Biological Engineering Systems II
ENGG*3260 0.50  Thermodynamics
ENGG*3450 0.50  Electronic Devices
ENGG*3830 0.50  Bio-Process Engineering
HIST*1250 0.50  Science and Technology in a Global Context
0.50 restricted electives

Semester 6
ENGG*3100 0.75  Engineering and Design III
ENGG*3170 0.50  Biopolymers
ENGG*3410 0.50  Systems and Control Theory
ENGG*3430 0.50  Heat and Mass Transfer
1.00 restricted electives

Semester 7
ENGG*3240 0.50  Engineering Economics
ENGG*4000 0.00  Proposal for Engineering Design IV
ENGG*4380 0.75  Bioreactor Design
ENGG*4390 0.75  Bio-instrumentation Design
1.00 restricted electives

Semester 8
ENGG*4110 1.00  Biological Engineering Design IV
1.75 restricted electives

Restricted Electives (see Program Guide for more information)
The Engineering Program requires Biological Engineering students to complete the following combination of elective credits to complete their program:
• 1.00 credits from the BIOE-1 Biological Engineering electives
• 0.75 credits from the BIOE-2 Biological Engineering design electives
• 2.00 credits from Complementary Studies electives
• 0.50 credits in Free Electives

Consult the Program Guide for further information on the prerequisite requirements specific to each elective. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

Biological Engineering Program Co-op (BIOE:C)

School of Engineering, College of Engineering and Physical Sciences

Students interested in problems requiring the application of knowledge from both the biological sciences and engineering will find a challenge as a Biological Engineer. This field of engineering is the application of principles, methods and concepts of biology to systems and tools, ranging in scale from molecular to ecosystem level. This field combines engineering principles with life sciences to design creative solutions for biological systems, with applications ranging from pharmaceutical and food manufacturing, biocatalysis to reduce waste, and production of sustainable, bio-based materials. For example, a Biological Engineer concentrating on biotechnology might design and manage bioreactors to improve productivity. A Biological Engineering graduate can pursue a career in a number of exciting fields, including food safety, bio-instrumentation, diagnostics and sensors in bio-systems, biomechanics and ergonomics.

Program Requirements
The Co-op program in Biological Engineering is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Biological Engineering Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5</td>
<td>COOP*2000 Work Term II</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>COOP*4000 Work Term IV</td>
<td>Academic Semester 7</td>
</tr>
<tr>
<td>5</td>
<td>COOP*5000 Work Term V</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education website.

Credit Summary (25.50 Total Credits)*

19.25 - Required Core Courses
1.00 – BIOE-1 Biological Engineering Electives
0.75 – BIOE-2 Biological Engineering Design Electives
2.00 – Complementary Studies Electives
0.50 – Free Electives
2.00 Co-op Work Terms

* Please refer to the Co-operative Education website for more information.
Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional if completed, the total number of credits will equal 26.00.

See Program Guide for more information on restricted electives and their prerequisite requirements. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

The recommended program sequence is outlined below.

**Major (Honours Program)**

### Semester 1 - Fall
- CHEM*1040 [0.50] General Chemistry I
- ENGG*1100 [0.75] Engineering and Design I
- ENGG*1500 [0.50] Engineering Analysis
- MATH*1200 [0.50] Calculus I
- PHYS*1130 [0.50] Physics with Applications

### Semester 2 - Winter
- CHEM*1050 [0.50] General Chemistry II
- CIS*1500 [0.50] Introduction to Programming
- ENGG*1210 [0.50] Engineering Mechanics I
- MATH*1210 [0.50] Calculus II
- PHYS*1010 [0.50] Introductory Electricity and Magnetism

### Semester 3 - Fall
- BIOL*1080 [0.50] Biological Concepts of Health
- COOP*1100 [0.00] Introduction to Co-operative Education
- ENGG*2230 [0.50] Fluid Mechanics
- ENGG*2400 [0.50] Engineering Systems Analysis
- MATH*2270 [0.50] Applied Differential Equations
- STAT*2120 [0.50] Probability and Statistics for Engineers

One of:
- BIOL*1070 [0.50] Discovering Biodiversity
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology

### Semester 4 - Winter
- BIOC*2580 [0.50] Introduction to Biochemistry
- ENGG*2100 [0.75] Engineering and Design II
- ENGG*2120 [0.50] Material Science
- ENGG*2450 [0.50] Electric Circuits
- ENGG*2660 [0.50] Biological Engineering Systems I
- MATH*2130 [0.50] Numerical Methods

### Summer Semester
- COOP*1000 [0.50] Co-op Work Term I

### Semester 5 - Fall
- ENGG*3160 [0.50] Biological Engineering Systems II
- ENGG*3260 [0.50] Thermodynamics
- ENGG*3450 [0.50] Electronic Devices
- ENGG*3830 [0.50] Bio-Process Engineering
- HIST*1250 [0.50] Science and Technology in a Global Context

0.50 restricted electives

### Winter Semester
- COOP*2000 [0.50] Co-op Work Term II

### Summer Semester
- COOP*3000 [0.50] Co-op Work Term III

### Semester 6 - Fall
- ENGG*3240 [0.50] Engineering Economics
- ENGG*4380 [0.75] Bioreactor Design
- ENGG*4390 [0.75] Bio-instrumentation Design

1.00 restricted electives

### Semester 7 - Winter
- ENGG*3100 [0.75] Engineering and Design III
- ENGG*3170 [0.50] Biomaterials
- ENGG*3410 [0.50] Systems and Control Theory
- ENGG*3430 [0.50] Heat and Mass Transfer
- PATH*3610 [0.50] Principles of Disease

0.50 restricted electives

### Semester 8
- ENGG*3100 [0.75] Engineering and Design III
- ENGG*3170 [0.50] Biomaterials
- ENGG*3410 [0.50] Systems and Control Theory
- ENGG*3430 [0.50] Heat and Mass Transfer
- PATH*3610 [0.50] Principles of Disease

2.00 restricted electives

### Semester 9
- ENGG*4180 [1.00] Biomedical Engineering Design IV

1.75 restricted electives

**Restrict Electives (see Program Guide for more information)**

The Engineering Program requires Biomedical Engineering students to complete the following combination of elective credits to complete their program:

- 2.50 credits from the BME-1 Biomedical Engineering electives
- 0.75 credits from the BME-2 Biomedical Engineering design electives
- 2.00 credits from Complementary Studies electives

Consult the Program Guide for further information on the prerequisite requirements specific to each elective. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

### Biomedical Engineering Program (BME)

School of Engineering, College of Engineering and Physical Sciences
Biomedical Engineering Program Co-op (BME:C)

School of Engineering, College of Engineering and Physical Sciences

Biomedical Engineering is a field of engineering that deals with health and medicine. (e.g.: electronic and mechanical devices used on biological materials, animals and humans, medical implants and instruments, ergonomics, bioinstrumentation, imaging and pharmacology). Graduates in Biomedical engineering are able to apply mathematical, scientific and engineering principles to a wide variety of fields and find employment across the private and public sectors of the health care industry. The program provides students with a common base of knowledge essential to engineering, and then allows them to select from a menu of electives to attain a degree of specialization in one of three areas, or to choose electives which broaden their general knowledge base. Elective concentrations are available in the areas of biomechanics; biosignal processing; and pharmaceuticals. The program is built around the concept of interdisciplinary application of engineering principles to health related problems.

Program Requirements

The Co-op program in Biomedical Engineering is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruituleph.ca/cecd). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Biomedical Engineering Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>Academic Semester 4</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5</td>
<td>COOP*2000 Work Term II</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7</td>
<td>COOP*4000 Work Term IV</td>
</tr>
<tr>
<td>5</td>
<td>COOP*5000 Work Term V</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (25.75 Total Credits)*

18.50 - Required Core Courses
2.50 – BME-1 Biomedical Engineering Electives
0.75 – BME-2 Biomedical Engineering Design Electives
2.00 – Complementary Studies Electives
2.00 Co-op Work Terms

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed, the total number of credits will equal 26.25.

See Program Guide for more information on restricted electives and their prerequisite requirements. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

The recommended program sequence is outlined below.

Major (Honours Program)

Semester 1 - Fall
CHEM*1040 [0.50] General Chemistry I
ENGG*1100 [0.75] Engineering and Design I
ENGG*1500 [0.50] Engineering Analysis
MATH*1200 [0.50] Calculus I
PHYS*1130 [0.50] Physics with Applications

Semester 2 - Winter
CHEM*1050 [0.50] General Chemistry II
CIS*1500 [0.50] Introduction to Programming
ENGG*1210 [0.50] Engineering Mechanics I
MATH*1210 [0.50] Calculus II
PHYS*1010 [0.50] Introductory Electricity and Magnetism

Semester 3 - Fall
COOP*1100 [0.00] Introduction to Co-operative Education
ENGG*2100 [0.75] Engineering and Design II
ENGG*2120 [0.50] Material Science
ENGG*2160 [0.50] Engineering Mechanics II
ENGG*2400 [0.50] Engineering Systems Analysis

Semester 4 - Winter
MATH*2270 [0.50] Applied Differential Equations

Semester 5 - Fall
BIOL*1080 [0.50] Biological Concepts of Health
BIOM*2000 [0.50] Concepts in Human Physiology
ENGG*2230 [0.50] Fluid Mechanics
ENGG*2450 [0.50] Electric Circuits
MATH*2130 [0.50] Numerical Methods
STAT*2120 [0.50] Probability and Statistics for Engineers

Note: Students pursuing the pharmaceutical series of electives may select ENGG*2660 in Semester 4. If ENGG*2660 is selected, students must select BIOM*2000 in semester 6 in place of a 0.50 restricted elective.

Summer Semester
COOP*1000 [0.50] Co-op Work Term I

Semester 6 - Winter
ENGG*3240 [0.50] Engineering Economics
ENGG*4390 [0.75] Bio-instrumentation Design

Semester 7 - Winter
ENGG*3100 [0.75] Engineering and Design III
ENGG*3170 [0.50] Biomaterials
ENGG*3410 [0.50] Systems and Control Theory
ENGG*3430 [0.50] Heat and Mass Transfer
PATH*3610 [0.50] Principles of Disease

Computer Engineering Program (CENG)

School of Engineering, College of Engineering and Physical Sciences

Computer Engineering is a field of engineering that focuses on the design and organization of computer systems. Graduates in Computer Engineering are able to apply mathematical, scientific and engineering principles to design and integrate computer systems suitable for applications in a wide range of fields. The program provides students with a common base of knowledge essential to computer engineering and then allows them to select from a menu of electives to attain a degree of specialization in one of four areas or to choose electives which broaden their general knowledge base. Elective concentrations are available in areas of Electronic Design automation, Software Design, Artificial Intelligence and Robotics, and Microsystems.

Major (Honours Program)

Semester 1
CHEM*1040 [0.50] General Chemistry I
CIS*1300 [0.50] Programming
ENGG*1100 [0.75] Engineering and Design I
MATH*1200 [0.50] Calculus I
PHYS*1130 [0.50] Physics with Applications

Semester 2
CIS*2500 [0.50] Intermediate Programming
ENGG*1210 [0.50] Engineering Mechanics I
ENGG*1500 [0.50] Engineering Analysis
MATH*1210 [0.50] Calculus II
PHYS*1010 [0.50] Introductory Electricity and Magnetism

Semester 3
CIS*2430 [0.50] Object Oriented Programming
CIS*2520 [0.50] Data Structures
ENGG*2400 [0.50] Engineering Systems Analysis

Last Revision: July 4, 2019
### Computer Engineering Program Co-op (CENG:C)

#### School of Engineering, College of Engineering and Physical Sciences

Computer Engineering is a field of engineering that focuses on the design and organization of computer systems. Graduates in Computer Engineering are able to apply mathematical, scientific and engineering principles to design and integrate computer systems suitable for applications in a wide range of fields. The program provides students with a common base of knowledge essential to computer engineering and then allows them to select from a menu of electives to attain a degree of specialization in one of four areas or to choose electives to broaden their knowledge base. Elective concentrations are available in areas of Electronic Design automation, Software Design, Artificial Intelligence and Robotics, and Microsystems.

#### Program Requirements

The Co-op program in Computer Engineering is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: [https://www.recruituqualph.ca/cecc/](https://www.recruituqualph.ca/cecc/)). Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

Computer Engineering Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

#### Credit Summary (26.00 Total Credits)*

| 20.50 - Required Core Courses |
| 1.50 – CENG-1 Computer Engineering Electives |
| 2.00 – Complementary Studies Electives |
| 2.00 Co-op Work Terms |

**Note:** A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed, the total number of credits will equal 26.50.

See Program Guide for more information on restricted electives and their prerequisite requirements. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

The recommended program sequence is outlined below.

#### Major (Honours Program)

**Semester 1 - Fall**

- CHEM*1040 [0.50] General Chemistry I
- CIS*1300 [0.50] Programming
- ENGG*1100 [0.50] Engineering and Design I
- MATH*1200 [0.50] Calculus I
- PHYS*1130 [0.50] Physics with Applications

**Semester 2 - Winter**

- CIS*2500 [0.50] Intermediate Programming
- ENGG*1210 [0.50] Engineering Mechanics I
- ENGG*1500 [0.50] Engineering Analysis
- MATH*1210 [0.50] Calculus II
- PHYS*1010 [0.50] Introductory Electricity and Magnetism

**Semester 3 - Fall**

- CIS*2430 [0.50] Object Oriented Programming
- CIS*2520 [0.50] Data Structures
- COOP*1100 [0.00] Introduction to Co-operative Education
- ENGG*2400 [0.50] Engineering Systems Analysis
- ENGG*2410 [0.50] Digital Systems Design Using Descriptive Languages
- MATH*2270 [0.50] Applied Differential Equations
- STAT*2120 [0.50] Probability and Statistics for Engineers

**Semester 4 - Winter**

- CIS*2910 [0.50] Discrete Structures in Computing II
- ENGG*2100 [0.75] Engineering and Design II
- ENGG*2450 [0.50] Electric Circuits
- ENGG*3380 [0.50] Computer Organization and Design
- MATH*2130 [0.50] Numerical Methods

**Summer Semester**

- COOP*1000 [0.50] Co-op Work Term I

**Semester 5 - Fall**

- ENGG*2120 [0.50] Material Science
- ENGG*3390 [0.50] Signal Processing
- ENGG*3450 [0.50] Electronic Devices
- ENGG*3640 [0.50] Microcomputer Interfacing
- HIST*1250 [0.50] Science and Technology in a Global Context

**Semester 6 - Fall**

- ENGG*3050 [0.50] Embedded Reconfigurable Computing Systems
- ENGG*3240 [0.50] Engineering Economics
- ENGG*4420 [0.75] Real-time Systems Design
- ENGG*4450 [0.50] Large-Scale Software Architecture Engineering

0.50 restricted electives (CIS*2750 recommended for students interested in the software engineering stream)
### Engineering Systems and Computing Program (ESC)

**School of Engineering, College of Engineering and Physical Sciences**

In the last quarter century, the computer has grown so rapidly in importance that engineering, science, business and industry could not function without it. With this growth, a need has evolved for specialists who can incorporate computers and information into complex industrial processes. The Engineering Systems and Computing program has been conceived to satisfy this need. Graduates from this program will have, in addition to the basic engineering skills, the ability to identify application areas where computer technology represents the optimum solution, specify appropriate software for process control, data reduction and/or expert system implementation and integrate the computer into the overall system application.

### Major (Honours Program)

#### Semester 1
- CHEM*1040 [0.50] General Chemistry I
- CIS*1300 [0.50] Programming
- ENGG*1100 [0.75] Engineering and Design I
- MATH*1200 [0.50] Calculus I
- PHYS*1130 [0.50] Physics with Applications

#### Semester 2
- CIS*2500 [0.50] Intermediate Programming
- ENGG*1210 [0.50] Engineering Mechanics I
- ENGG*1500 [0.50] Engineering Analysis
- MATH*1210 [0.50] Calculus II
- PHYS*1010 [0.50] Introductory Electricity and Magnetism

#### Semester 3
- CIS*2430 [0.50] Object Oriented Programming
- CIS*2520 [0.50] Data Structures
- ENGG*2230 [0.50] Fluid Mechanics
- ENGG*2400 [0.50] Engineering Systems Analysis
- ENGG*2410 [0.50] Digital Systems Design Using Descriptive Languages
- MATH*2270 [0.50] Applied Differential Equations

#### Semester 4
- ENGG*2100 [0.75] Engineering and Design II
- ENGG*2120 [0.50] Material Science
- ENGG*2450 [0.50] Electric Circuits
- MATH*2130 [0.50] Numerical Methods
- STAT*2120 [0.50] Probability and Statistics for Engineers

#### Semester 5
- ENGG*3260 [0.50] Thermodynamics
- ENGG*3390 [0.50] Signal Processing
- ENGG*3450 [0.50] Electronic Devices
- ENGG*3640 [0.50] Microcomputer Interfacing

#### Semester 6
- ENGG*3100 [0.75] Engineering and Design III
- ENGG*3130 [0.50] Modelling Complex Systems
- ENGG*3410 [0.50] Systems and Control Theory
- ENGG*3430 [0.50] Heat and Mass Transfer
- HIST*1250 [0.50] Science and Technology in a Global Context

#### Semester 7
- ENGG*3240 [0.50] Engineering Economics
- ENGG*4000 [0.00] Proposal for Engineering Design IV
- ENGG*4420 [0.75] Real-time Systems Design
- 0.50 restricted electives

**Summer Semester**
- COOP*4000 [0.50] Co-op Work Term IV

**Fall Semester**
- COOP*5000 [0.50] Co-op Work Term V
- ENGG*4000 [0.00] Proposal for Engineering Design IV

**Semester 8 - Winter**
- ENGG*4170 [1.00] Computer Engineering Design IV
- ENGG*4540 [0.50] Advanced Computer Architecture
- ENGG*4550 [0.50] VLSI Digital Design

1.00 electives

### Restricted Electives (see Program Guide for more information)

The Engineering Program requires Engineering Systems and Computing students to complete the following combination of elective credits to complete their program:

- 1.50 credits from the ESC-1 Engineering Systems and Computing electives
- 0.75 credits from the ESC-2 Engineering Systems and Computing electives
- 2.00 credits from Complementary Studies electives

Consult the Program Guide for further information on the prerequisite requirements specific to each elective. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

### Engineering Systems and Computing Program Co-op (ESC:C)

**School of Engineering, College of Engineering and Physical Sciences**

In the last quarter century, the computer has grown so rapidly in importance that engineering, science, business and industry could not function without it. With this growth, a need has evolved for specialists who can incorporate computers and information into complex industrial processes. The Engineering Systems and Computing program has been conceived to satisfy this need. Graduates from this program will have, in addition to the basic engineering skills, the ability to identify application areas where computer technology represents the optimum solution, specify appropriate software for process control, data reduction and/or expert system implementation and integrate the computer into the overall system application.

### Program Requirements

The Co-op program in Engineering Systems and Computing is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: [https://www.recruitpuelph.ca/cees/]). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

### Engineering Systems and Computing Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5</td>
<td>COOP*2000 Work Term II</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7</td>
<td>COOP*4000 Work Term IV</td>
</tr>
<tr>
<td>5</td>
<td>COOP*5000 Work Term V</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

### Credit Summary (25.50 Total Credits)*

19.25 - Required Core Courses

1.50 – ESC-1 Engineering Systems and Computing Electives
0.75 – ESC-2 Engineering Systems and Computing Electives
2.00 – Complementary Studies Electives
2.00 Co-op Work Terms

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed, the total number of credits will equal 26.00.

See Program Guide for more information on restricted electives and their prerequisite requirements. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

The recommended program sequence is outlined below.

### Major (Honours Program)

#### Semester 1 - Fall
- CHEM*1040 [0.50] General Chemistry I
- CIS*1300 [0.50] Programming
- ENGG*1100 [0.75] Engineering and Design I
- MATH*1200 [0.50] Calculus I
At least 1.00 credit must be selected from the following courses:

- PHYS*1130 [0.50] Physics with Applications
- CIS*2500 [0.50] Intermediate Programming
- ENGG*1210 [0.50] Engineering Mechanics I
- ENGG*1500 [0.50] Engineering Analysis
- MATH*1210 [0.50] Calculus II
- PHYS*1010 [0.50] Introductory Electricity and Magnetism

Semester 3 - Fall

- CIS*2430 [0.50] Object Oriented Programming
- CIS*2520 [0.50] Data Structures
- COOP*1100 [0.00] Introduction to Co-operative Education
- ENGG*2250 [0.50] Fluid Mechanics
- ENGG*2400 [0.50] Engineering Systems Analysis
- ENGG*2410 [0.50] Digital Systems Design Using Descriptive Languages
- MATH*2270 [0.50] Applied Differential Equations

Semester 4 - Winter

- ENGG*2100 [0.75] Engineering and Design II
- ENGG*2120 [0.50] Material Science
- ENGG*2450 [0.50] Electric Circuits
- MATH*2130 [0.50] Numerical Methods
- STAT*2120 [0.50] Probability and Statistics for Engineers

Summer Semester

- COOP*1000 [0.50] Co-op Work Term I

Semester 5 - Fall

- ENGG*3260 [0.50] Thermodynamics
- ENGG*3390 [0.50] Signal Processing
- ENGG*3450 [0.50] Electronic Devices
- ENGG*3640 [0.50] Microcomputer Interfacing
- 1.00 restricted electives

Winter Semester

- COOP*2000 [0.50] Co-op Work Term II

Summer Semester

- COOP*3000 [0.50] Co-op Work Term III

Semester 6 - Fall

- ENGG*3240 [0.50] Engineering Economics
- ENGG*4420 [0.75] Real-time Systems Design
- ENGG*4450 [0.50] Large-Scale Software Architecture Engineering
- 1.00 or 1.25 restricted electives

Semester 7 - Winter

- ENGG*3100 [0.75] Engineering and Design III
- ENGG*3130 [0.50] Modelling Complex Systems
- ENGG*3410 [0.50] Systems and Control Theory
- ENGG*3430 [0.50] Heat and Mass Transfer
- HIST*1250 [0.50] Science and Technology in a Global Context
- 0.50 restricted electives

Summer Semester

- COOP*4000 [0.50] Co-op Work Term IV

Fall Semester

- COOP*5000 [0.50] Co-op Work Term V
- ENGG*4000 [0.00] Proposal for Engineering Design IV

Semester 8 - Winter

- ENGG*4120 [1.00] Engineering Systems and Computing Design IV
- ENGG*4280 [0.75] Digital Process Control Design
- 1.00 or 1.25 electives

Environmental Engineering Program (ENVE)

School of Engineering, College of Engineering and Physical Sciences

The degradation of the environment is a concern shared by citizens, government agencies, non-governmental agencies and businesses. The Environmental Engineering Program offered by the School of Engineering provides graduates with design and engineering skills to minimize and prevent the impact of human activities on water, soil and air systems. Both simple and innovative solutions are part of the tool box. Graduates will also creatively integrate humanistic and social perspectives in their solutions.

Major (Honours Program)

Semester 1

- CHEM*1040 [0.50] General Chemistry I
- ENGG*1100 [0.75] Engineering and Design I
- ENGG*1500 [0.50] Engineering Analysis
- MATH*1200 [0.50] Calculus I
- PHYS*1130 [0.50] Physics with Applications

Semester 2

- CHEM*1050 [0.50] General Chemistry II
- CIS*1500 [0.50] Introduction to Programming
- ENGG*1210 [0.50] Engineering Mechanics I
- MATH*1210 [0.50] Calculus II
- PHYS*1010 [0.50] Introductory Electricity and Magnetism

Semester 3

- ENGG*2100 [0.75] Engineering and Design II
- ENGG*2120 [0.50] Material Science
- ENGG*2130 [0.50] Introduction to Environmental Engineering
- ENGG*2400 [0.50] Engineering Systems Analysis
- MATH*2270 [0.50] Applied Differential Equations

One of:

- BIOL*1900 [0.50] Introduction to Molecular and Cellular Biology
- MICR*2420 [0.50] Introduction to Microbiology

Semester 4

- ENGG*2230 [0.50] Fluid Mechanics
- ENGG*2560 [0.50] Environmental Engineering Systems
- HIST*1250 [0.50] Science and Technology in a Global Context
- MATH*2130 [0.50] Numerical Methods
- STAT*2120 [0.50] Probability and Statistics for Engineers
- 0.50 restricted electives

Semester 5

- ENGG*3180 [0.50] Air Quality
- ENGG*3240 [0.50] Engineering Economics
- ENGG*3260 [0.50] Thermodynamics
- ENGG*3590 [0.50] Water Quality
- ENGG*3650 [0.50] Hydrology
- ENGG*3670 [0.50] Soil Mechanics

Semester 6

- ENGG*3100 [0.75] Engineering and Design III
- ENGG*3220 [0.50] Groundwater Engineering
- ENGG*3410 [0.50] Systems and Control Theory
- ENGG*3430 [0.50] Heat and Mass Transfer
- ENGG*3470 [0.50] Mass Transfer Operations
- 0.50 restricted electives

Semester 7

- ENGG*4000 [0.00] Proposal for Engineering Design IV
- ENGG*4340 [0.50] Solid and Hazardous Waste Management
- ENGG*4370 [0.75] Urban Water Systems Design
- 1.50 restricted electives

Semester 8

- ENGG*4130 [1.00] Environmental Engineering Design IV
- 2.00 restricted electives

Restricted Electives (see Program Guide for more information)

The Engineering Program requires Environmental Engineering students to complete the following combination of elective credits to complete their program:

- 1.00 credits from the ENVE-1 Environmental Engineering electives
- 2.00 credits from the ENVE-2 Environmental Engineering electives
- 1.50 credits from Complementary Studies electives

Consult the Program Guide for further information on the prerequisite requirements specific to each elective. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

Minor (Honours Program)

Students must be registered in a B.Eng degree program specialization other than Environmental Engineering to apply for a Minor in Environmental Engineering. A Minor in Environmental Engineering consists of at least 5.00 course credits. A maximum of 2.50 course credits taken as part of the Environmental Engineering Minor may also be applied toward the requirements of the B.Eng. Major specialization.

The following courses (2.00 credits) are required:

- CHEM*1050 [0.50] General Chemistry II
- ENGG*2560 [0.50] Environmental Engineering Systems
- ENGG*3180 [0.50] Air Quality
- ENGG*3590 [0.50] Water Quality

At least 1.00 credit must be selected from the following courses:

- BIOC*2580 [0.50] Introduction to Biochemistry
- CHEM*2700 [0.50] Organic Chemistry I
- CHEM*3360 [0.50] Environmental Chemistry and Toxicology
- ENGG*3080 [0.50] Energy Resources & Technologies
- ENGG*3250 [0.50] Energy Management & Utilization
- ENGG*3470 [0.50] Mass Transfer Operations
- ENGG*4070 [0.50] Life Cycle Assessment for Sustainable Design
- ENGG*4240 [0.50] Site Remediation
- ENGG*4340 [0.50] Solid and Hazardous Waste Management
- ENGG*4510 [0.50] Assessment & Management of Risk
The recommended program sequence is outlined below.

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (25.50 Total Credits)*

19.00 - Required Core Courses
1.00 – ENVE-1 Environmental Engineering Electives
2.00 – ENVE-2 Environmental Engineering Electives
1.50 – Complementary Studies Electives
2.00 - Co-op Work Terms

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed, the total number of credits will equal 26.00

See Program Guide for more information on restricted electives and their prerequisite requirements. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

Major (Honours Program)

Semester 1 - Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*1040</td>
<td>0.50</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>ENGG*1100</td>
<td>0.75</td>
<td>Engineering and Design I</td>
</tr>
<tr>
<td>ENGG*1500</td>
<td>0.50</td>
<td>Engineering Analysis</td>
</tr>
<tr>
<td>MATH*1200</td>
<td>0.50</td>
<td>Calculus I</td>
</tr>
<tr>
<td>PHYS*1130</td>
<td>0.50</td>
<td>Physics with Applications</td>
</tr>
</tbody>
</table>

Semester 2 - Winter

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*1050</td>
<td>0.50</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>CIS*1500</td>
<td>0.50</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>ENGG*1210</td>
<td>0.50</td>
<td>Engineering Mechanics I</td>
</tr>
<tr>
<td>MATH*1210</td>
<td>0.50</td>
<td>Calculus II</td>
</tr>
<tr>
<td>PHYS*1010</td>
<td>0.50</td>
<td>Introductory Electricity and Magnetism</td>
</tr>
</tbody>
</table>

Semester 3 - Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*1100</td>
<td>0.00</td>
<td>Introduction to Co-operative Education</td>
</tr>
<tr>
<td>ENGG*2130</td>
<td>0.50</td>
<td>Introduction to Environmental Engineering</td>
</tr>
<tr>
<td>ENGG*2230</td>
<td>0.50</td>
<td>Fluid Mechanics</td>
</tr>
<tr>
<td>ENGG*2400</td>
<td>0.50</td>
<td>Engineering Systems Analysis</td>
</tr>
<tr>
<td>MATH*2270</td>
<td>0.50</td>
<td>Applied Differential Equations</td>
</tr>
<tr>
<td>STAT*2120</td>
<td>0.50</td>
<td>Probability and Statistics for Engineers</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL*1090</td>
<td>0.50</td>
<td>Introduction to Molecular and Cellular Biology</td>
</tr>
<tr>
<td>MICR*2420</td>
<td>0.50</td>
<td>Introduction to Microbiology</td>
</tr>
</tbody>
</table>

Semester 4 - Winter

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*2100</td>
<td>0.75</td>
<td>Engineering and Design II</td>
</tr>
<tr>
<td>ENGG*2120</td>
<td>0.50</td>
<td>Material Science</td>
</tr>
<tr>
<td>ENGG*2560</td>
<td>0.50</td>
<td>Environmental Engineering Systems</td>
</tr>
<tr>
<td>HIST*1250</td>
<td>0.50</td>
<td>Science and Technology in a Global Context</td>
</tr>
<tr>
<td>MATH*2130</td>
<td>0.50</td>
<td>Numerical Methods</td>
</tr>
<tr>
<td>0.50 restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summer Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*1000</td>
<td>0.50</td>
<td>Co-op Work Term I</td>
</tr>
</tbody>
</table>

Semester 5 - Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*3180</td>
<td>0.50</td>
<td>Air Quality</td>
</tr>
<tr>
<td>ENGG*3240</td>
<td>0.50</td>
<td>Engineering Economics</td>
</tr>
<tr>
<td>ENGG*3260</td>
<td>0.50</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>ENGG*3590</td>
<td>0.50</td>
<td>Water Quality</td>
</tr>
<tr>
<td>ENGG*3650</td>
<td>0.50</td>
<td>Hydrology</td>
</tr>
<tr>
<td>ENGG*3670</td>
<td>0.50</td>
<td>Soil Mechanics</td>
</tr>
<tr>
<td>1.50 restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 6 - Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*4340</td>
<td>0.50</td>
<td>Solid and Hazardous Waste Management</td>
</tr>
<tr>
<td>ENGG*4370</td>
<td>0.75</td>
<td>Urban Water Systems Design</td>
</tr>
<tr>
<td>1.50 restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 7 - Winter

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*3100</td>
<td>0.75</td>
<td>Engineering and Design III</td>
</tr>
<tr>
<td>ENGG*3220</td>
<td>0.50</td>
<td>Groundwater Engineering</td>
</tr>
<tr>
<td>ENGG*3410</td>
<td>0.50</td>
<td>Systems and Control Theory</td>
</tr>
<tr>
<td>ENGG*3430</td>
<td>0.50</td>
<td>Heat and Mass Transfer</td>
</tr>
<tr>
<td>ENGG*3470</td>
<td>0.50</td>
<td>Mass Transfer Operations</td>
</tr>
<tr>
<td>0.50 restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summer Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*4000</td>
<td>0.50</td>
<td>Co-op Work Term IV</td>
</tr>
</tbody>
</table>

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*5000</td>
<td>0.50</td>
<td>Co-op Work Term V</td>
</tr>
<tr>
<td>ENGG*4000</td>
<td>0.00</td>
<td>Proposal for Engineering Design IV</td>
</tr>
</tbody>
</table>

Semester 8 - Winter

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*4130</td>
<td>1.00</td>
<td>Environmental Engineering Design IV</td>
</tr>
<tr>
<td>2.00 restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Food Engineering (FENG)

School of Engineering, College of Engineering and Physical Sciences

Minor (Honours Program)

Students must be registered in the B.Eng. degree program to apply for a Minor in Food Engineering.

The minor can be satisfied by taking the following additional courses:

ACCT*1220 [0.50] Introductory Financial Accounting
BIOC*2580 [0.50] Introduction to Biochemistry
ENGG*2660 [0.50] Biological Engineering Systems I
ENGG*3830 [0.50] Bio-Process Engineering
FOOD*2150 [0.50] Introduction to Nutritional and Food Science
MICR*1200 [0.50] Fundamentals of Applied Microbiology

One of:

ENGG*4300 [0.75] Food Processing Engineering Design
ENGG*4380 [0.75] Bioreactor Design

Two of:

FOOD*4070 [0.50] Food Packaging

X. Degree Programs, Bachelor of Engineering [B.Eng.]

2019-2020 Undergraduate Calendar
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOD*4110</td>
<td>0.50</td>
<td>Meat and Poultry Processing</td>
</tr>
<tr>
<td>MCS*3010</td>
<td>0.50</td>
<td>Quality Management</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOD*3160</td>
<td>0.75</td>
<td>Food Processing I</td>
</tr>
<tr>
<td>FOOD*4520</td>
<td>0.50</td>
<td>Utilization of Cereal Grains for Human Food</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOD*2400</td>
<td>0.50</td>
<td>Introduction to Food Chemistry</td>
</tr>
<tr>
<td>FOOD*3010</td>
<td>0.50</td>
<td>Food Chemistry</td>
</tr>
<tr>
<td>FOOD*3230</td>
<td>0.75</td>
<td>Food Microbiology</td>
</tr>
<tr>
<td>FOOD*3260</td>
<td>0.50</td>
<td>Industrial Microbiology</td>
</tr>
</tbody>
</table>

*Students must incorporate a food engineering application as part of their capstone design course worth 1.0 credits in the final semester of their B.Eng. major program.

**NOTE:** Courses taken for the minors are credited to appropriate elective areas.

### Mechanical Engineering Program (MECH)

#### School of Engineering, College of Engineering and Physical Sciences

Mechanical Engineering at Guelph is built around concepts of sustainability and sustainable design to equip graduates to tackle issues associated with emerging technologies. Graduates in mechanical engineering are able to apply mathematical, scientific and engineering principles to a wide variety of fields and find employment across the private and public sectors. The program provides students with a common base of knowledge essential to mechanical engineering, and then allows them to select from a menu of electives to attain a degree of specialization in one of five areas, or to choose electives which broaden their general knowledge base. Elective concentrations are available in the areas of wind and solar energy, food and beverage engineering, mechatronics, manufacturing system design and biomechanics.

#### Major (Honours Program)

**Semester 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*1040</td>
<td>0.50</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CIS*1500</td>
<td>0.50</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>ENGG*1100</td>
<td>0.75</td>
<td>Engineering and Design I</td>
</tr>
<tr>
<td>MATH*1200</td>
<td>0.50</td>
<td>Calculus I</td>
</tr>
<tr>
<td>PHYS*1130</td>
<td>0.50</td>
<td>Physics with Applications</td>
</tr>
</tbody>
</table>

**Semester 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*1210</td>
<td>0.50</td>
<td>Engineering Mechanics I</td>
</tr>
<tr>
<td>ENGG*1500</td>
<td>0.50</td>
<td>Engineering Analysis</td>
</tr>
<tr>
<td>MATH*1210</td>
<td>0.50</td>
<td>Calculus II</td>
</tr>
<tr>
<td>PHYS*1010</td>
<td>0.50</td>
<td>Introductory Electricity and Magnetism</td>
</tr>
</tbody>
</table>

0.50 restricted electives

**Semester 3**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*1070</td>
<td>0.25</td>
<td>Occupational Health and Safety</td>
</tr>
<tr>
<td>ENGG*2100</td>
<td>0.75</td>
<td>Engineering and Design II</td>
</tr>
<tr>
<td>ENGG*2120</td>
<td>0.50</td>
<td>Material Science</td>
</tr>
<tr>
<td>ENGG*2160</td>
<td>0.50</td>
<td>Engineering Mechanics II</td>
</tr>
<tr>
<td>ENGG*2400</td>
<td>0.50</td>
<td>Engineering Systems Analysis</td>
</tr>
<tr>
<td>MATH*2270</td>
<td>0.50</td>
<td>Applied Differential Equations</td>
</tr>
</tbody>
</table>

**Semester 4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*2180</td>
<td>0.50</td>
<td>Introduction to Manufacturing Processes</td>
</tr>
<tr>
<td>ENGG*2230</td>
<td>0.50</td>
<td>Fluid Mechanics</td>
</tr>
<tr>
<td>ENGG*2340</td>
<td>0.50</td>
<td>Kinematics and Dynamics</td>
</tr>
<tr>
<td>ENGG*2450</td>
<td>0.50</td>
<td>Electric Circuits</td>
</tr>
<tr>
<td>MATH*2130</td>
<td>0.50</td>
<td>Numerical Methods</td>
</tr>
<tr>
<td>STAT*2120</td>
<td>0.50</td>
<td>Probability and Statistics for Engineers</td>
</tr>
</tbody>
</table>

**Semester 5**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*3240</td>
<td>0.50</td>
<td>Engineering Economics</td>
</tr>
<tr>
<td>ENGG*3260</td>
<td>0.50</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>ENGG*3280</td>
<td>0.75</td>
<td>Machine Design</td>
</tr>
<tr>
<td>ENGG*3510</td>
<td>0.50</td>
<td>Electromechanical Devices</td>
</tr>
<tr>
<td>HIST*1250</td>
<td>0.50</td>
<td>Science and Technology in a Global Context</td>
</tr>
</tbody>
</table>

0.50 restricted electives

**Semester 6**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*3100</td>
<td>0.75</td>
<td>Engineering and Design III</td>
</tr>
<tr>
<td>ENGG*3370</td>
<td>0.50</td>
<td>Applied Fluids and Thermodynamics</td>
</tr>
<tr>
<td>ENGG*3410</td>
<td>0.50</td>
<td>Systems and Control Theory</td>
</tr>
<tr>
<td>ENGG*3430</td>
<td>0.50</td>
<td>Heat and Mass Transfer</td>
</tr>
</tbody>
</table>

1.00 restricted electives

**Semester 7**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*3140</td>
<td>0.50</td>
<td>Mechanical Vibration</td>
</tr>
<tr>
<td>ENGG*4000</td>
<td>0.00</td>
<td>Proposal for Engineering Design IV</td>
</tr>
</tbody>
</table>

2.00 restricted electives

**Semester 8**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*4160</td>
<td>1.00</td>
<td>Mechanical Engineering Design IV</td>
</tr>
</tbody>
</table>

1.75 restricted electives

### Restricted Electives (see Program Guide for more information)

The Engineering Program requires Mechanical Engineering students to complete the following combination of elective credits to complete their program:

- 3.50 credits from the MECH-1 Mechanical Engineering electives
- 0.75 credits from the MECH-2 Mechanical Engineering design electives
- 2.00 credits from Complementary Studies electives

Consult the Program Guide for further information on the prerequisite requirements specific to each elective. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

### Mechanical Engineering Program Co-op (MECH:C)

#### School of Engineering, College of Engineering and Physical Sciences

The Co-op program in Mechanical Engineering is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

#### Mechanical Engineering Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Semester 1</td>
<td>COOP*1000 Work Term II</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>Academic Semester 2</td>
<td>COOP*1100</td>
<td>Academic Semester 3</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>Academic Semester 3</td>
<td>COOP*2000 Work Term III</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>Academic Semester 4</td>
<td>COOP*4000 Work Term IV</td>
<td>Academic Semester 6</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Credit Summary (25.50 Total Credits)*

17.25 - Required Core Courses
3.50 – MECH-1 Mechanical Engineering Electives
0.75 – MECH-2 Mechanical Engineering Design Electives
2.00 – Complementary Studies Electives
2.00 – Co-op Work Terms

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional if completed, the total number of credits will equal 26.00.

See Program Guide for more information on restricted electives and their prerequisite requirements. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

The recommended program sequence is outlined below.

#### Major (Honours Program)

**Semester 1 - Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*1040</td>
<td>0.50</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CIS*1500</td>
<td>0.50</td>
<td>Introduction to Programming</td>
</tr>
</tbody>
</table>

**Semester 2 - Winter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*1210</td>
<td>0.50</td>
<td>Engineering Mechanics I</td>
</tr>
<tr>
<td>ENGG*1500</td>
<td>0.50</td>
<td>Engineering Analysis</td>
</tr>
<tr>
<td>MATH*1200</td>
<td>0.50</td>
<td>Calculus II</td>
</tr>
</tbody>
</table>

2019-2020 Undergraduate Calendar  Last Revision: July 4, 2019
Water Resources Engineering Program (WRE)

School of Engineering, College of Engineering and Physical Sciences

Water resources engineering focuses on the use and management of land and water resources in rural and urban watersheds. The hydrologic and hydraulic behaviour of watershed flow systems is combined with engineering science and ecological principles in the design of water management systems and strategies. Water management includes flood prevention, warning and control; drainage; design of natural channels; irrigation; and erosion prevention and control. The supply of water for municipal, industrial, and agricultural purposes is considered in the context of resource conservation. Identification of potential point and diffused sources of pollutants is used to develop efficient, environmentally sustainable and economical methods to preserve high-quality water to sustain human life and water-dependent ecosystems.

Major (Honours Program)

Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*1040</td>
<td>0.50</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>ENGG*1100</td>
<td>0.75</td>
<td>Engineering and Design I</td>
</tr>
<tr>
<td>ENGG*1500</td>
<td>0.50</td>
<td>Engineering Analysis</td>
</tr>
<tr>
<td>MATH*1200</td>
<td>0.50</td>
<td>Calculus I</td>
</tr>
<tr>
<td>PHYS*1130</td>
<td>0.50</td>
<td>Physics with Applications</td>
</tr>
</tbody>
</table>

Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*1050</td>
<td>0.50</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>CIS*1500</td>
<td>0.50</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>ENGG*1210</td>
<td>0.50</td>
<td>Engineering Mechanics I</td>
</tr>
<tr>
<td>MATH*1210</td>
<td>0.50</td>
<td>Calculus II</td>
</tr>
<tr>
<td>PHYS*1010</td>
<td>0.50</td>
<td>Introductory Electricity and Magnetism</td>
</tr>
</tbody>
</table>

Semester 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*2230</td>
<td>0.50</td>
<td>Fluid Mechanics</td>
</tr>
<tr>
<td>ENGG*2400</td>
<td>0.50</td>
<td>Engineering Systems Analysis</td>
</tr>
<tr>
<td>GEOG*2000</td>
<td>0.50</td>
<td>Geomorphology</td>
</tr>
<tr>
<td>MATH*2270</td>
<td>0.50</td>
<td>Applied Differential Equations</td>
</tr>
<tr>
<td>STAT*2120</td>
<td>0.50</td>
<td>Probability and Statistics for Engineers</td>
</tr>
<tr>
<td>BIOL*1090</td>
<td>0.50</td>
<td>Introduction to Molecular and Cellular Biology</td>
</tr>
<tr>
<td>MICR*2420</td>
<td>0.50</td>
<td>Introduction to Microbiology</td>
</tr>
</tbody>
</table>

Semester 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*2100</td>
<td>0.75</td>
<td>Engineering and Design II</td>
</tr>
<tr>
<td>ENGG*2120</td>
<td>0.50</td>
<td>Material Science</td>
</tr>
<tr>
<td>ENGG*2550</td>
<td>0.50</td>
<td>Water Management</td>
</tr>
<tr>
<td>ENGG*2560</td>
<td>0.50</td>
<td>Environmental Engineering Systems</td>
</tr>
<tr>
<td>MATH*2130</td>
<td>0.50</td>
<td>Numerical Methods</td>
</tr>
<tr>
<td>0.50 restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 5

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*3240</td>
<td>0.50</td>
<td>Engineering Economics</td>
</tr>
<tr>
<td>ENGG*3260</td>
<td>0.50</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>ENGG*3590</td>
<td>0.50</td>
<td>Water Quality</td>
</tr>
<tr>
<td>ENGG*3650</td>
<td>0.50</td>
<td>Hydrology</td>
</tr>
<tr>
<td>ENGG*3670</td>
<td>0.50</td>
<td>Soil Mechanics</td>
</tr>
<tr>
<td>0.50 restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*3100</td>
<td>0.75</td>
<td>Engineering and Design III</td>
</tr>
<tr>
<td>ENGG*3220</td>
<td>0.50</td>
<td>Groundwater Engineering</td>
</tr>
<tr>
<td>ENGG*3430</td>
<td>0.50</td>
<td>Heat and Mass Transfer</td>
</tr>
<tr>
<td>HIST*1250</td>
<td>0.50</td>
<td>Science and Technology in a Global Context</td>
</tr>
<tr>
<td>1.00 restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 7

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*3340</td>
<td>0.50</td>
<td>Geographic Information Systems in Environmental Engineering</td>
</tr>
<tr>
<td>ENGG*4000</td>
<td>0.00</td>
<td>Proposal for Engineering Design IV</td>
</tr>
<tr>
<td>ENGG*4360</td>
<td>0.75</td>
<td>Soil-Water Conservation Systems Design</td>
</tr>
<tr>
<td>ENGG*4370</td>
<td>0.75</td>
<td>Urban Water Systems Design</td>
</tr>
<tr>
<td>1.00 restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*4150</td>
<td>1.00</td>
<td>Water Resources Engineering Design IV</td>
</tr>
<tr>
<td>ENGG*4250</td>
<td>0.75</td>
<td>Watershed Systems Design</td>
</tr>
<tr>
<td>1.00 restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ENGG*4250 can be taken in Semester 6

Restricted Electives (see Program Guide for more information)

The Engineering Program requires Water Resources Engineering students to complete the following combination of elective credits to complete their program:

- 1.00 credits from the WRE-1 Water Resources Engineering electives
- 1.00 credits from the WRE-2 Environmental and Water Resources Engineering electives
- 2.00 credits from Complementary Studies electives

Consult the Program Guide for further information on the prerequisite requirements specific to each elective. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

Water Resources Engineering Program Co-op (WRE:C)

School of Engineering, College of Engineering and Physical Sciences

Water resources engineering focuses on the use and management of land and water resources in rural and urban watersheds. The hydrologic and hydraulic behaviour of watershed flow systems is combined with engineering science and ecological principles in the design of water management systems and strategies. Water management includes flood prevention, warning and control; drainage; design of natural channels; irrigation; and erosion prevention and control. The supply of water for municipal, industrial, and agricultural purposes is considered in the context of resource conservation. Identification of potential point and diffused sources of pollutants is used to develop efficient, environmentally sustainable and economical methods to preserve high-quality water to sustain human life and water-dependent ecosystems.

Program Requirements

The Co-op program in Water Resources Engineering is a five-year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Water Resources Engineering Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
</tbody>
</table>
To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education Program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (25.50 Total Credits)*

19.50 - Required Core Courses
1.00 – WRE-1 Water Resources Engineering Electives
1.00 – WRE-2 Environmental and Water Resources Electives
2.00 – Complementary Studies Electives
2.00 - Co-op Work Terms

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed, the total number of credits will equal 26.00.

See Program Guide for more information on restricted electives and their prerequisite requirements. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.

The recommended program sequence is outlined below.

Major (Honours Program)

Semester 1 - Fall
CHEM*1040 [0.50] General Chemistry I
ENGG*1100 [0.75] Engineering and Design I
ENGG*1500 [0.50] Engineering Analysis
MATH*1200 [0.50] Calculus I
PHYS*1130 [0.50] Physics with Applications

Semester 2 - Winter
CHEM*1050 [0.50] General Chemistry II
CIS*1500 [0.50] Introduction to Programming
ENGG*1210 [0.50] Engineering Mechanics I
MATH*1210 [0.50] Calculus II
PHYS*1010 [0.50] Introductory Electricity and Magnetism

Semester 3 - Fall
COOP*1100 [0.50] Introduction to Co-operative Education
ENGG*2230 [0.50] Fluid Mechanics
ENGG*2400 [0.50] Engineering Systems Analysis
GEOR*2000 [0.50] Geomorphology
MATH*2270 [0.50] Applied Differential Equations
STAT*2120 [0.50] Probability and Statistics for Engineers
One of:
BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
MICR*2420 [0.50] Introduction to Microbiology

Semester 4 - Winter
ENGG*2100 [0.75] Engineering and Design II
ENGG*2120 [0.50] Material Science
ENGG*2550 [0.50] Water Management
ENGG*2560 [0.50] Environmental Engineering Systems
MATH*2130 [0.50] Numerical Methods
0.50 restricted electives

Summer Semester
COOP*1000 [0.50] Co-op Work Term I

Semester 5 - Fall
ENGG*3240 [0.50] Engineering Economics
ENGG*3260 [0.50] Thermodynamics
ENGG*3590 [0.50] Water Quality
ENGG*3650 [0.50] Hydrology
ENGG*3670 [0.50] Soil Mechanics
0.50 restricted electives

Winter Semester
COOP*2000 [0.50] Co-op Work Term II

Summer Semester
COOP*3000 [0.50] Co-op Work Term III

Semester 6 - Fall
ENGG*3340 [0.50] Geographic Information Systems in Environmental Engineering
ENGG*4360 [0.75] Soil-Water Conservation Systems Design
ENGG*4370 [0.75] Urban Water Systems Design
1.00 restricted electives

Semester 7 - Winter
ENGG*3100 [0.75] Engineering and Design III
ENGG*3220 [0.50] Groundwater Engineering
ENGG*3430 [0.50] Heat and Mass Transfer
HIST*1250 [0.50] Science and Technology in a Global Context
1.00 restricted electives

Summer Semester
COOP*4000 [0.50] Co-op Work Term IV

Fall Semester
COOP*5000 [0.50] Co-op Work Term V
ENGG*4000 [0.00] Proposal for Engineering Design IV

Semester 8 - Winter
ENGG*4150 [1.00] Water Resources Engineering Design IV
ENGG*4250 [0.75] Watershed Systems Design
1.00 restricted electives

Note: ENGG*4250 can be taken in Semester 7

Restricted Electives (see Program Guide for more information)

The Engineering Program requires Water Resources Engineering students to complete the following combination of elective credits to complete their program:

• 1.00 credits from the WRE-1 Water Resources Engineering electives
• 1.00 credits from the WRE-2 Environmental and Water Resources electives
• 2.00 credits from Complementary Studies electives

Consult the Program Guide for further information on the prerequisite requirements specific to each elective. Students can take a maximum of 1.50 credits at the 1000 level from the above list of electives.
Bachelors of Landscape Architecture (B.L.A.)

Landscape Architecture is the art and science of designing and conserving land and water for human use and enjoyment. As a profession, Landscape Architecture is concerned with two scales of planning and design.

The first scale is with the development of specific sites for residential, recreational, institutional, commercial and industrial projects. The second scale pertains to the regional landscape where the issues include management plans for forest, park and recreation areas, agricultural lands protection, gravel pit mining and restoration, hazard land studies, and visual resource analysis.

Program Information

Objectives of the Program

Landscape Architecture is a diverse and rewarding design profession. Landscape architects play an important role in shaping our environment, working in collaboration with other design professionals, specialists and the public.

Students in the B.L.A. program attain professional knowledge and skill that prepares them to deal with problems that concern the interface between people and the environment. Program emphasis is on core professional knowledge domains that include landscape analysis, design, implementation, communication, history and professional practice. Additional required and elective courses in the arts and sciences provide a well-rounded education.

Graduates of the program have exciting careers in the public and private sector. As landscape architects, they design memorable places that are attractive, functional and sustainable and that affect the way our cities, suburbs, rural and wilderness areas are planned, designed and managed.

Accreditation

The Bachelor of Landscape Architecture program is accredited by the Landscape Architecture Accreditation Council (LAAC) of the Canadian Society of Landscape Architects (CSLA). This accreditation is also recognized by the American Society of Landscape Architects (ASLA). Graduates of accredited landscape architecture programs have the educational qualifications to apply for membership in provincial and state professional associations in Canada and the United States after completion of the required number of years of professional practice and successful completion of required examinations.

Admission to the Landscape Architecture Program

Students wishing to enter the program of study leading to the Bachelor of Landscape Architecture degree should consult Section IV--Admission Information.

Degree

The degree granted for the successful completion of the program is the Bachelor of Landscape Architecture (B.L.A.).

Selection of Electives

All electives may be chosen independently although counselling with the BLA Program Counsellor is highly recommended. In selecting electives two approaches may be followed: 1) electives may be chosen from a variety of disciplines to achieve breadth of knowledge or, 2) all or most electives may be chosen in a subject area in order to pursue a particular field of interest in depth. Some of these fields might include agricultural and biological sciences, environmental studies, studio arts, geography, philosophy or sociology.

Students wishing to elect a permissible substitute shall do so in consultation with the BLA Program Coordinator and BLA Program Counsellor. A substitute course will normally be in the same academic area as that listed in the Landscape Architecture Program.

Academic Advising

Students can consult the BLA Coordinator who is a faculty member that can address program issues and individual curriculum queries.

Computers

Expertise in many aspects of computer application is now a fundamental skill for the profession. Recognizing this, the school provides computer facilities in the building. If it is feasible we recommend that students acquire their own computer within the first two years of the program.

Field Trips

Participation in organized visits to site study areas and project sites is obligatory for all students taking certain courses in landscape architecture. To the extent that it is possible, students will be informed of the dates, destinations and cost of field trips prior to registration. Students who have reason to seek exemption from the requirement may apply to the director prior to registration for permission to substitute papers on appropriate topics.

Pre-Professional Experience

It is considered highly advisable that the prospective graduate prepare for later professional practice through summer employment in the landscape industry. Two summers spent in landscape related work followed by 1 summer in a professional office is considered to be a desirable sequence of employment.

Continuation of Study

Students are advised to consult the regulations for continuation of study within the program which are outlined in detail in Section VIII--Undergraduate Degree Regulations & Procedures.

Conditions for Graduation

In order to qualify for graduation from the 8 semester Honours B.L.A. program, the student must successfully complete all of the courses approved for the program (20.00 credits) and maintain a minimum 60.0% cumulative average.

Schedule of Studies

Major (Honours Program)

Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1500</td>
<td>0.50</td>
<td>Humans in the Natural World</td>
</tr>
<tr>
<td>LARC*1100</td>
<td>0.75</td>
<td>Introduction to Design and Communication Studio</td>
</tr>
<tr>
<td>LARC*1950</td>
<td>0.50</td>
<td>History of Cultural Form</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH*1150</td>
<td>0.50</td>
<td>Introduction to Anthropology</td>
</tr>
<tr>
<td>PHIL*1010</td>
<td>0.50</td>
<td>Introductory Philosophy: Social and Political Issues</td>
</tr>
<tr>
<td>PSYC*1000</td>
<td>0.50</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td>SOC*1100</td>
<td>0.50</td>
<td>Sociology</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC*2020</td>
<td>0.75</td>
<td>Foundational Design Studio</td>
</tr>
<tr>
<td>LARC*2230</td>
<td>0.50</td>
<td>Planting Design</td>
</tr>
<tr>
<td>LARC*2420</td>
<td>0.50</td>
<td>Materials and Techniques</td>
</tr>
<tr>
<td>PHIL*2070</td>
<td>0.50</td>
<td>Philosophy of the Environment</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC*2100</td>
<td>0.50</td>
<td>Landscape and Site Analysis</td>
</tr>
<tr>
<td>LARC*2240</td>
<td>0.50</td>
<td>Plants in the Landscape</td>
</tr>
<tr>
<td>LARC*2410</td>
<td>0.50</td>
<td>Site Engineering</td>
</tr>
<tr>
<td>LARC*3040</td>
<td>0.75</td>
<td>Site Design Studio</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC*2820</td>
<td>0.50</td>
<td>Urban and Regional Planning</td>
</tr>
<tr>
<td>LARC*3050</td>
<td>0.75</td>
<td>Urban Design Studio</td>
</tr>
<tr>
<td>LARC*3430</td>
<td>0.50</td>
<td>Introduction to Landscape Construction</td>
</tr>
<tr>
<td>0.50 Social Science elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: A "Social Science" elective can be any course in the following areas: Anthropology, Economics, Geography, Women's Studies, International Development, Political Science, Psychology or Sociology.

Semester 5

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC*3060</td>
<td>0.75</td>
<td>Landscape Rehabilitation Design Studio</td>
</tr>
<tr>
<td>LARC*3440</td>
<td>0.75</td>
<td>Landscape Construction and Documentation</td>
</tr>
<tr>
<td>LARC*4610</td>
<td>0.50</td>
<td>Professional Practice</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 6

Choose one of the following three options:

**Option 1**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Option 2**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC*4620</td>
<td>1.00</td>
<td>Landscape Architecture Internship</td>
</tr>
<tr>
<td>1.00 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Option 3**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange Program (2.00 credits)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 7

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC*3070</td>
<td>1.00</td>
<td>Urban and Community Design Studio</td>
</tr>
<tr>
<td>LARC*3320</td>
<td>0.50</td>
<td>Principles of Landscape Ecology</td>
</tr>
<tr>
<td>LARC*4510</td>
<td>0.50</td>
<td>Honours Thesis</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 8

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC*4090</td>
<td>0.50</td>
<td>Seminar</td>
</tr>
<tr>
<td>LARC*4710</td>
<td>1.00</td>
<td>Capstone Design Studio</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The University of Guelph offers general and honours programs leading to the B.Sc. degree. The general program consists of a minimum of 15.00 credits (usually 30 semester courses) involving normally 6 semesters of study. The requirements for the honours program is a minimum of 20.00 credits (usually 40 semester courses) which may be obtained over 8 semesters of study. Some majors may require more than 20.00 credits.

The Three Semester System

Most of the B.Sc. programs operate on the three semester system. In this system each of the Fall, Winter and Summer semesters is of 12 weeks duration. Two semesters are equivalent to 1 academic year at a university on the traditional system. In the three semester system, students may vary their rate of progress towards graduation. However, since many science courses must be taken in a certain sequence and not all courses are offered each semester, most science students are required to proceed from semester to semester in restricted patterns. Furthermore, the majority of courses of the honours programs are offered only in the regular fall and winter semesters.

Additional information may be obtained from Admissions Services, Office of Registrarial Services. The three-semester system and the pass-by-course method of advancement allow considerable flexibility of program arrangement. In addition, a variety of program contents is available which the student may modify to meet individual requirements.

Transfer from One B.Sc. Program to Another

On entrance to the B.Sc. program, the student may elect to follow an intended area of specialization or to postpone this decision until a later semester. The choice of a particular program of study may be most effectively made at the end of Semester 3 or 4. Judicious selection of courses in each and every semester will allow the easiest transfer between programs without incurring the need for additional semesters of study. The program counsellor of the particular college from which it is anticipated that the majority of science courses will be taken should be consulted for advice.

Program Information

B.Sc. Program Requirements

Regulations 1-9 apply to all B.Sc. students.

1. Entry Credits

In general, the 4U /grade 12 credit or its equivalent is required in a subject area to allow entrance to the initial university course. Students who lack this requirement can remedy the deficiency by successful completion of:

- BIOL*1020 for students lacking biology
- CHEM*1060 for students lacking chemistry

If more than one of the above courses is taken, students are required to complete additional credits beyond the minimum total required for the degree.

2. 1st Year Science Core

All majors within the B.Sc. degree are required to complete the first year core as outlined within their major. The core consists of courses in biology, chemistry, physics and mathematical science.

3. 1000 Level Credits

If more than 7.00 credits at the 1000 level are completed, students are required to complete additional credits beyond the minimum total required for the degree.

4. 3000 and 4000 Level Credits

There is a requirement for a minimum of 6.00 science credits at the 3000- and 4000-levels with a minimum of 2.00 credits at the 4000 level.

5. Science Credits

A minimum of 16.00 science credits (usually 32 courses) is required for the honours major program. The inclusion of a minor in a non-science area involves the reduction to 14.00 science credits. A minimum of 12.00 science credits is required for the three year general B.Sc. degree. Acceptable science courses means “acceptable to the B.Sc. Program Committee”. Lists of acceptable science courses are available at: https://www.uoguelph.ca/bsc/Approved_electives.

6. Liberal Education Requirement

All majors within the B.Sc. degree require a specified number of liberal education credits. The goal of the liberal education requirement is to increase breadth by requiring credits that are outside the disciplines of science with a focus in at least one of the following areas:

- Policy, operational and management practices pertaining to a practical activity, or influence of social, cultural and economic environments on such activities.
- Personal or professional growth including ethical responsibility, leadership and communication.
- Development of historical, cultural, global, artistic, social, and language competencies.

A complete listing of acceptable courses can be found at: https://www.uoguelph.ca/bsc/.

7. Free Electives

All majors within the B.Sc. degree have a specified number of free electives. The free elective requirement can be fulfilled by any course on the B.Sc. approved science or liberal education elective list. Courses that are restricted from B.Sc. students are not eligible to fulfill the free elective requirement. This restriction is stated in the course description.

8. Double-Counting of Credits

A maximum of 2.50 credits required in a major program may be applied to meet the requirements of a minor or an additional major.

For a completed minor in a non B.Sc. area, students can apply up to 1.00 credits at the 3000/4000 level from their minor towards the 6.00 credits at the 3000/4000 level required for the degree.

Students cannot declare a major or minor in the three year general B.Sc. degree.

9. Continuation of Study

Students are advised to consult the regulations for continuation of study outlined in detail in Section VIII—Undergraduate Degree & Regulations.

General Program Requirements

The general B.Sc. degree requires the successful completion of 15.00 credits. Normally 2.50 credits (usually 5 courses) are taken in each semester so that the degree may be completed in 6 semesters. The general science program is designed to give a broad general training in biological science, chemistry, physics and mathematical science. This is achieved by requiring each student to take a minimum of 1.00 credits in each of the above areas and an additional 0.50 credits in three of the four above areas. The courses to be taken in semesters 4 to 6 may be selected to allow a broad study of the sciences from the list of approved electives for B.Sc. students.

Honours Program Requirements

In order to graduate from the honours program, students must fulfill all program requirements for the program and have achieved a 60%, or higher, cumulative average over all course attempts. Normally 2.50 credits (usually 5 courses) are taken in each semester so that the degree may be completed in generally 8 semesters. The following types of honours programs are offered:

Honours Major Programs

- Major in a subject
- Major in a subject with a minor or a second major

Honours Major

Majors permit a student to study science in greater depth than is permitted by the general program. The student is required to take a minimum of 1.00 credits (usually 2 courses) in each of biological science, chemistry, physics and mathematical science. In each of semesters 3 to 8, students select science credits so that the total program provides a broad science training with concentration in an area of physical science or biological science. A major normally consists of certain prescribed courses (minimum of 8.00 credits) and a number of elective courses to complete the requirements for the degree. The composition of science courses selected must contain a sufficient number (minimum of 6.00 credits) of 3000 and 4000 level courses including a grouping (minimum of 2.00 credits) at the 4000 level. A major program may be studied in conjunction with a minor in an area of science, humanities or social science.

Honours Minor

A minor is a group of courses which provides for exposure to and mastery of the fundamental principles of a subject. A minor consists of a minimum of 5.00 credits (normally 10 courses). It may also require courses from other areas to be taken along with the specified courses of the minor. A minor is taken in conjunction with a major. Students should seek advice from the program counsellor of either the College of Biological Science or the College of Engineering and Physical Sciences dependent upon their primary area(s) of interest. Refer to B.Sc. Program Requirements: Regulation 6 Double-Counting of Credits.

Special Study Options

Study at Other Universities

Students contemplating study at another university for credit towards a Bachelor of Science degree at the University of Guelph should refer to the general regulations governing Letters of Permission in Section VIII—Degree Regulations & Procedures in this calendar. Students must obtain approval for the Letter of Permission prior to undertaking studies at another institution.

Study Abroad

The University of Guelph offers Study Abroad and Exchange opportunities for students to enrich their learning experience. Bachelor of Science students are encouraged to participate in any of the diverse options available. Courses taken while on exchange or study abroad may be used as electives or core requirements pending appropriate approvals. For further information on the programs available, please refer to Section V - International Study. Students are advised to meet with the Centre for International Programs and B.Sc. Program Counsellor to discuss the feasibility of participating in an exchange or semester abroad.
Doctor of Veterinary Medicine

Students in the B.Sc. program who intend to apply for admission to the Doctor of Veterinary Medicine program should register for the Major Biological Science or Major Physical Science program, or the major of their choice. Prospective candidates for the D.V.M. program should consult the admission requirements for the program. Students may obtain assistance in selecting a program that will meet the requirements for the Doctor of Veterinary Program and for continuation in biological or physical science programs by consulting the appropriate Program Counsellor.

General Program (BSCG)

Continuation of Study

Students are advised to consult the regulations for continuation of study within the program which are outlined in detail in Section VIII--Undergraduate Degree Regulations & Procedures.

Conditions for Graduation

In order to qualify for graduation from the general program the student is required to attain a passing grade in a minimum of 15.00 required credits as outlined in the Total Course Requirements for all students in the General Science Program and have achieved a minimum cumulative average of 50%.

Total Course Requirements for all Students in the General Science Program

Total of 15.00 credits as follows:

1. 4.00 credits from the first year science core - 1.00 credits beyond the 4U/grade 12 level in each of biological science, chemistry, mathematical science, physics. Note: A maximum of 7.00 credits at the 1000 level may be used towards the degree requirements.
2. An additional 0.50 credits from at least 3 of the following subject areas: biological science, biochemistry/chemistry, mathematical science, physics.
3. 6.50 additional credits selected from the list of approved sciences electives for the B.Sc. degree program of which 2.50 credits must be at the 3000 or 4000 level. Note: One of: BIOL*1020, CHEM*1060 may be counted towards the degree requirements, counting as 0.50 credits in science.
4. 2.00 credits - Liberal Education electives selected from the B.Sc. list of Liberal Education electives. 5. 1.00 credits in electives.

Recommended Schedule for Students in Biological Science Areas

Semester 1

BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology *
CHEM*1040 [0.50] General Chemistry I
MATH*1080 [0.50] Elements of Calculus I
PHYS*1080 [0.50] Physics for Life Sciences
0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at http://www.bsc.uoguelph.ca/revisedss

Semester 2

BIOL*1070 [0.50] Discovering Biodiversity *
CHEM*1050 [0.50] General Chemistry II
PHYS*1070 [0.50] Physics for Life Sciences II
One of:
CIS*1000 [0.50] Introduction to Computer Applications
CIS*1200 [0.50] Introduction to Computing
CIS*1500 [0.50] Introduction to Programming
STAT*2040 [0.50] Statistics I
MATH*1090 [0.50] Elements of Calculus II
0.50 Liberal Education electives

* BIOL*1080 is a prerequisite for some courses in the biological sciences. Students are strongly recommended to also complete this course by the end of the third semester.

Semester 3 to 6

A minimum of 2.50 credits in each semester, including at least 2.00 acceptable science credits per semester. For details consult 'Total Course Requirements'.

Recommended Schedule for Students in Physical Science Areas

Semester 1

CHEM*1040 [0.50] General Chemistry I
IPS*1500 [1.00] Integrated Mathematics and Physics I
One of:
BIOL*1070 [0.50] Discovering Biodiversity
BIOL*1080 [0.50] Biological Concepts of Health
BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at http://www.bsc.uoguelph.ca/revisedss

Semester 2

CHEM*1050 [0.50] General Chemistry II
IPS*1510 [1.00] Integrated Mathematics and Physics II
One of:
BIOL*1070 [0.50] Discovering Biodiversity
BIOL*1080 [0.50] Biological Concepts of Health
BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
0.50 Liberal Education electives

Semester 3 to 6

A minimum of 2.50 credits in each semester, including 2.00 acceptable science courses per semester. For details consult 'Total Course Requirements'.

Honours Programs (BSCH)

Honours Program Majors

The following honour majors are available:

Biological Sciences:

- 20.00 credits - Animal Biology (ABIO)
- 20.00 credits - Biochemistry (BIOC)
- 20.00 credits - Biodiversity (BOD)
- 20.00 credits - Biological Science (BIOS)
- 20.00 credits - Bio-Medical Science (BIOM)
- 20.00 credits - Biomedical Toxicology (BTDX)
- 20.00 credits - Environmental Biology (ENVB)
- 20.00 credits - Food Science (FOOD)
- 20.00 credits - Human Kinetics (HK)
- 20.00 credits - Marine and Freshwater Biology (MFB)
- 20.00 credits - Microbiology (MICR)
- 20.00 credits - Molecular Biology and Genetics (MBG)
- 20.00 credits - Neuroscience (NEUR)
- 20.00 credits - Nutritional and Nutraceutical Sciences (NANS)
- 20.00 credits - Plant Science (PLSC)
- 20.00 credits - Wildlife Biology and Conservation (WBC)
- 20.00 credits - Zoology (ZOOG)

Physical Sciences:

- 20.00 credits - Biological and Medical Physics (BMPH)
- 20.00 credits - Biological and Pharmaceutical Chemistry (BPCH)
- 20.00 credits - Chemical Physics (CHPY)
- 20.00 credits - Chemistry (CHEM)
- 20.00 credits - Environmental Geomatics (EG)
- 20.00 credits - Mathematical Science (MSCI)
- 20.00 credits - Nanoscience (NANO)
- 20.00 credits - Physical Science (PSCI)
- 20.00 credits - Physics (PHYS)
- 20.00 credits - Theoretical Physics (THPY)

Co-operative Educational Programs:

- 21.50 credits - Biochemistry (Co-op) (BIOC)
- 22.00 credits - Biological and Medical Physics (Co-op) (BMPH:C)
- 21.50 credits - Biological and Pharmaceutical Chemistry (Co-op) (BPCH)
- 22.00 credits - Marine and Freshwater Biology (Co-op) (MF:BC)
- 21.50 credits - Biomedical Toxicology (Co-op) (BTDX)
- 22.00 credits - Chemical Physics (Co-op) (CHPY:C)
- 21.50 credits - Chemistry (Co-op) (CHEM)
- 21.50 credits - Environmental Geomatics (Co-op) (EG:C)
- 21.50 credits - Food Science (Co-op) (FOOD:C)
- 22.00 credits - Nanoscience (NANO:C)
- 21.50 credits - Microbiology (Co-op) (MICR:C)
- 22.00 credits - Physics (Co-op) (PHYS:C)

Honours Program Minors

Minors are available in the following science areas with the particular credit requirements being given (additional minors are available from the College of Arts and the College of Social and Applied Human Sciences). A minor may include additional prerequisites - consult with the appropriate faculty advisor.

Biological Sciences:

- 5.00 credits - Biology (BIOL)
- 5.00 credits - Biochemistry (BIOC)
- 5.00 credits - Biotechnology (BIOT)
- 5.00 credits - Microbiology (MICR)
- 5.00 credits - Molecular Biology and Genetics (MBG)
- 5.00 credits - Neuroscience (NEUR)
- 5.00 credits - Nutritional and Nutraceutical Sciences (NANS)
- 5.00 credits - Plant Science (PLSC)
- 5.00 credits - Zoology (ZOO)
Physical Sciences:
5.00 credits - Chemistry (CHEM)
5.00 credits - Physics (PHYS)

Environmental Sciences:
5.00 credits - Ecology (ECOL)
5.00 credits - Geographic Information Systems (GIS) and Environmental Analysis

Mathematical Sciences:
5.00 credits - Computing and Information Science (CIS)
5.00 credits - Mathematical Science (MSCI)
5.00 credits - Mathematics (MATH)
5.00 credits - Statistics (STAT)

Additional Disciplines:
5.00 credits - Business Economics (BECN)

Continuation of Study
Students are advised to consult the regulations for continuation of study within the program which are outlined in detail in Section VIII--Undergraduate Degree Regulations & Procedures.

Conditions for Graduation

Schedules 1 and 2
In order to qualify for graduation from the honours program, the student must fulfill all program requirements and have achieved 60%, or higher, cumulative average in all course attempts.

Note: A student registered in an honours program who has successfully completed all required courses and the specified total number of credits for the program but does not have a cumulative average of 60%, or higher, may apply to graduate from the general program.

Co-operative Education Program
Admission to the Co-operative Education program may be granted on entry to the University or by application normally before the conclusion of Semester 1. Application forms can be obtained from the Coop Education and Career Services website https://www.regnruituelp.ca/ces/

Conditions for Graduation from the B.Sc. Co-operative Education Program
Conditions for graduation are the same as the corresponding regular B.Sc. program. In addition, all work reports and work performance evaluations must have a grade of satisfactory or better.

Animal Biology (ABIO)

Department of Animal Biosciences, Ontario Agricultural College

Major (Honours Program)
Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor.

Semester 1
BIOC*1050 [0.50] - Biology of Plants & Animals in Managed Ecosystems
CHEM*1040 [0.50] - General Chemistry I
MATH*1080 [0.50] - Elements of Calculus I

PHYS*1080 [0.50] - Physics for Life Sciences

0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at: https://www.uoguelph.ca/bsc/revised_SS

Semester 2
ANSC*1210 [1.00] - Principles of Animal Care and Welfare
BIOC*1090 [0.50] - Introduction to Molecular and Cellular Biology
CHEM*1050 [0.50] - General Chemistry II

PHYS*1070 [0.50] - Physics for Life Sciences II

Semester 3
AGR*2350 [0.50] - Animal Production Systems, Health and Industry
BIOC*2580 [0.50] - Introduction to Biochemistry

MBG*2040 [0.50] - Foundations in Molecular Biology and Genetics

MBG*2400 [0.50] - Fundamentals of Plant and Animal Genetics

0.50 electives or restricted electives

Students are encouraged to consider CIS*1000 as an elective if they wish to enhance their computer literacy.

Semester 4
ANSC*2340 [0.50] - Structure of Farm Animals
MCB*2050 [0.50] - Molecular Biology of the Cell
NUTR*3210 [0.50] - Fundamentals of Nutrition

STAT*2040 [0.50] - Statistics I

0.50 electives or restricted electives

Semester 5
ANSC*3080 [0.50] - Agricultural Animal Physiology

ANSC*3120 [0.50] - Introduction to Animal Nutrition

1.50 electives or restricted electives

Semester 6
ANSC*3040 [0.50] - Animal Reproduction
ANSC*3270 [0.50] - Animal Disorders
MBG*3060 [0.50] - Quantitative Genetics

1.00 electives or restricted electives

Semester 7
2.50 electives or restricted electives

Semester 8
2.50 electives or restricted electives

Restricted Electives
1. Students must complete 2.00 credits of Liberal Education electives ANSC*1210 is a Liberal Education course, 1.00 credit. 1.00 additional credits from Liberal Education courses are required. The list of liberal education electives for B.Sc. students can be found at: http://www.uoguelph.ca/bsc

2. 0.50 credits is required from each of the following areas: Animal Nutrition, Animal Breeding & Genetics, and Animal Physiology & Behaviour. Students are encouraged to consult with the Faculty Advisor for help in tailoring their selection to meet personal and career interests.

Animal Breeding & Genetics [0.50] Required

ANSC*4050 [0.50] - Biotechnology in Animal Science
MBG*4020 [0.50] - Genetics of Companion Animals
MBG*4030 [0.50] - Animal Breeding Methods and Applications

Animal Nutrition [0.50] Required

ANSC*3170 [0.50] - Nutrition of Fish and Crustacea
ANSC*3180 [0.50] - Wildlife Nutrition
ANSC*4260 [0.50] - Beef Cattle Nutrition
ANSC*4270 [0.50] - Dairy Cattle Nutrition
ANSC*4280 [0.50] - Poultry Nutrition
ANSC*4290 [0.50] - Swine Nutrition
ANSC*4560 [0.50] - Pet Nutrition

EQN*4020 [0.50] - Advanced Equine Nutrition

Animal Physiology & Behaviour [0.50] Required

ANSC*3090 [0.50] - Vertebrate Ethology
ANSC*4090 [0.50] - Applied Animal Behaviour
ANSC*4100 [0.50] - Applied Environmental Physiology and Animal Housing
ANSC*4350 [0.50] - Experiments in Animal Biology
ANSC*4470 [0.50] - Animal Metabolism
ANSC*4490 [0.50] - Applied Endocrinology

3. An additional 3.00 credits must be obtained by selecting courses from the above lists and from the following:

ANSC*3050 [0.50] - Aquaculture: Advanced Issues
ANSC*4610 [0.50] - Critical Analysis in Animal Science
ANSC*4650 [0.50] - Comparative Immunology
ANSC*4700 [0.50] - Research in Animal Biology I
ANSC*4710 [0.50] - Research in Animal Biology II
BIOC*3560 [0.50] - Structure and Function in Biochemistry
EQN*3050 [0.50] - Equine Exercise Physiology
MICR*3230 [0.50] - Immunology

PATH*3610 [0.50] - Principles of Disease
POP*3520 [0.50] - Epidemiology
POP*4230 [0.50] - Animal Health

Credit Summary (20.00 Total Credits)

3.50 - First year science credits

6.50 - Required science courses semesters 3 - 8

4.50 - Restricted electives (#2 and #3)

1.50 - Approved Science electives

1.00 - Required Arts and/or Social Science course (ANSC 1210)

1.00 – Liberal Education electives

2.00 - Free electives - any approved elective for B.Sc. students.

Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

Biochemistry (BIOC)

Department of Molecular and Cellular Biology, College of Biological Science

A B.Sc. in Biochemistry offers a multidisciplinary curriculum that gives students broad exposure to the life sciences with specific attention paid to the physical and chemical nature of biomolecular systems. The lab-intensive experience in this program prepares students to pursue post-graduate research opportunities in many different life science related fields. Graduates are also positioned to be successful in obtaining entrance to a number of professional programs, as well as employment in industry and government.
Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. The major will require the completion of at least 20.00 credits as indicated below:

**Major (Honours Program)**

**Semester 1**
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1040 [0.50] General Chemistry I
- MATH*1080 [0.50] Elements of Calculus I
- PHYS*1080 [0.50] Physics for Life Sciences
- 0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at [https://www.uoguelph.ca/bse/revised_SS](https://www.uoguelph.ca/bse/revised_SS).

**Semester 2**
- BIOL*1070 [0.50] Discovering Biodiversity
- BIOL*1080 [0.50] Biological Concepts of Health
- CHEM*1050 [0.50] General Chemistry II
- MATH*1090 [0.50] Elements of Calculus II
- PHYS*1070 [0.50] Physics for Life Sciences II
- 0.50 Liberal Education electives

**Semester 3**
- BIOC*2580 [0.50] Introduction to Biochemistry
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- MICR*2420 [0.50] Introduction to Microbiology
- STAT*2040 [0.50] Statistics I
- 0.50 Liberal Education electives

**Semester 4**
- BIOC*3560 [0.50] Structure and Function in Biochemistry
- CHEM*2480 [0.50] Analytical Chemistry I
- CHEM*2700 [0.50] Organic Chemistry I
- MCB*2050 [0.50] Molecular Biology of the Cell
- MICR*2430 [0.50] Methods in Microbial Culture and Physiology

**Semester 5**
- BIOC*3570 [0.75] Analytical Biochemistry
- CHEM*2880 [0.50] Physical Chemistry
- CHEM*3750 [0.50] Organic Chemistry II
- elective(s) or restricted electives to a maximum of 2.75 total credits

**Semester 6**
- MBG*3350 [0.75] Laboratory Methods in Molecular Biology
- elective(s) or restricted electives to a maximum of 2.75 total credits

**Semester 7**
- 2.50 elective(s) or restricted electives

**Semester 8**
- BIOC*4540 [0.75] Enzymology

**Restricted Electives**

1. Students must take as part of their program: 4.00 credits from the following list, with at least 1.00 of these credits from BIOC*4520, BIOC*4580, MCB*4050.
   - BIOC*4520 [0.50] Metabolic Processes
   - BIOC*4580 [0.50] Membrane Biochemistry
   - BIOL*3300 [0.50] Applied Bioinformatics
   - BIOM*3200 [1.00] Biomedical Physiology
   - MBG*3040 [0.50] Molecular Biology of the Gene
   - MBG*3080 [0.50] Bacterial Genetics
   - MCB*3100 [0.50] Dynamics of Cell Function and Signaling
   - MCB*4010 [0.50] Advanced Cell Biology
   - MCB*4050 [0.50] Protein and Nucleic Acid Structure
   - MCB*4500 [1.00] Research Project in Molecular & Cellular Biology I
   - MCB*4510 [1.00] Research Project in Molecular & Cellular Biology II
   - MCB*4600 [0.50] Topics in Molecular and Cellular Biology
   - MICR*3230 [0.50] Immunology
   - MICR*3330 [0.50] World of Viruses
   - MICR*4330 [0.50] Molecular Virology
   - MICR*4530 [0.50] Immunology II
   - PBOI*3110 [0.50] Crop Physiology
   - PBOI*4750 [0.50] Genetic Engineering of Plants
   - STAT*2050 [0.50] Statistics II
   - TOX*4590 [0.50] Biochemical Toxicology
   - PHYS*2030 [0.50] Biophysics of Excitable Cells
   - PHYS*2240 [0.50] Thermal Physics
   - PHYS*2330 [0.50] Electricity and Magnetism I
   - PHYS*2600 [0.50] General Astronomy
   - PHYS*3080 [0.50] Energy

2. Students must take as part of their program: 0.50 credits from the following list:
   - STAT*2050 [0.50] Statistics II
   - TOX*4590 [0.50] Biochemical Toxicology

**Credit Summary (20.00 Total Credits)**

4.50 - First year science credits
7.75 - Required science courses semesters 3 - 8
4.50 - Restricted elective (# 1 and # 2 in restricted elective list)
1.00 - Liberal Education electives
2.25 - Free electives – any approved electives for B.Sc. students

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Minor (Honours Program)**

A minor in Biochemistry consists of at least 5.00 course credits. The following courses are required:

- BIOC*3560 [0.50] Structure and Function in Biochemistry
- BIOC*3570 [0.75] Analytical Biochemistry
- BIOC*4540 [0.75] Enzymology
- CHEM*2480 [0.50] Analytical Chemistry I
- CHEM*2700 [0.50] Organic Chemistry I
- MCB*2050 [0.50] Molecular Biology of the Cell
- MICR*2430 [0.50] Methods in Microbial Culture and Physiology

In addition, at least 1.50 credits must be chosen from the following courses, with at least 1.00 credits from the first three courses listed:

- BIOC*4520 [0.50] Metabolic Processes
- BIOC*4580 [0.50] Membrane Biochemistry
- MBG*3350 [0.75] Laboratory Methods in Molecular Biology
- MCB*4050 [0.50] Protein and Nucleic Acid Structure
- MICR*3230 [0.50] Immunology
- MICR*3330 [0.50] World of Viruses
- TOX*4590 [0.50] Biochemical Toxicology

**Biochemistry (Co-op) (BIOC:C)**

Department of Molecular and Cellular Biology, College of Biological Science

A B.Sc. in Biochemistry offers a multidisciplinary curriculum that gives students broad exposure to the life sciences with specific attention paid to the physical and chemical nature of biomolecular systems. The lab-intensive experience in this program prepares students to pursue post-graduate research opportunities in many different life science related fields. Graduates are also positioned to be successful in obtaining entrance to a number of professional programs, as well as employment in industry and government.

**Program Requirements**

The Co-op program in Biochemistry is a four and a half year program, including four work terms. Students must complete a Fall (Sequence B only), Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: [https://www.recruitguelph.ca/cecs/](https://www.recruitguelph.ca/cecs/)). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Biochemistry Academic and Co-op Work Term Schedule – Sequence A

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2 COOP*1100</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1000 Work Term I</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5</td>
<td>COOP*2000 Work Term II</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7 COOP*4000 Work Term IV</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Biochemistry Academic and Co-op Work Term Schedule – Sequence B

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2 COOP*1100</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1000 Work Term I</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5 COOP*3000 Work Term III</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7 COOP*4000 Work Term IV</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

**Credit Summary (21.50 Total Credits)*

| 4.50 | First year science credits |
| 7.75 | Required science courses semesters 3 - 8 |
| 4.50 | Restricted elective (# 1 and #2 in restricted elective list) |
| 1.00 | Liberal Education electives |
| 2.25 | Free electives – any approved electives for B.Sc. students |
| 1.50 | Co-op Work Terms |

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Note:** A minimum of three Co-op work terms including a Summer, Fall (Sequence B only), and Winter are necessary to complete the Co-op requirement. " A fourth Co-op work term is optional and if completed, the total number of credits will equal 22.00.

The recommended program sequence is outlined below.

**Sequence A**

**Semester 1 - Fall**

| BIOL*1090 [0.50] | Introduction to Molecular and Cellular Biology |
| CHEM*1040 [0.50] | General Chemistry I |
| MATH*1080 [0.50] | Elements of Calculus I |
| PHYS*1080 [0.50] | Physics for Life Sciences |

0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at https://www.uoguelph.ca/bsc/revised_SS

**Semester 2 - Winter**

| BIOL*1070 [0.50] | Discovering Biodiversity |
| BIOL*1080 [0.50] | Biological Concepts of Health |
| CHEM*1050 [0.50] | General Chemistry II |
| COOP*1100 [0.00] | Introduction to Co-operative Education |
| MATH*1090 [0.50] | Elements of Calculus II |
| PHYS*1070 [0.50] | Physics for Life Sciences II |

**Summer Semester**

No academic semester or work term

**Semester 3 - Fall**

| BIOL*2580 [0.50] | Introduction to Biochemistry |
| CHEM*2480 [0.50] | Analytical Chemistry I |
| CHEM*2880 [0.50] | Physical Chemistry |
| MBG*2040 [0.50] | Foundations in Molecular Biology and Genetics |

0.50 Liberal Education electives

**Winter Semester**

| COOP*1000 [0.50] | Co-op Work Term I |

**Semester 4 - Summer**

| BIOL*3570 [0.75] | Analytical Biochemistry |
| CHEM*2700 [0.50] | Organic Chemistry I |
| MICR*2420 [0.50] | Introduction to Microbiology |
| STAT*2040 [0.50] | Statistics I |

Electives or restricted electives to a maximum of 2.75 total credits

**Semester 5 - Fall**

| BIOL*3560 [0.50] | Structure and Function in Biochemistry |
| CHEM*3750 [0.50] | Organic Chemistry II |
| MCB*2050 [0.50] | Molecular Biology of the Cell |
| MICR*2430 [0.50] | Methods in Microbial Culture and Physiology |

0.50 Liberal Education electives

**Winter Semester**

| COOP*2000 [0.50] | Co-op Work Term II |

**Semester 6 - Winter**

| MBG*3350 [0.75] | Laboratory Methods in Molecular Biology |

Electives or restricted electives to a maximum of 2.75 total credits

**Semester 7 - Winter**

| BIOL*4540 [0.75] | Enzymology |

Electives or restricted electives to a maximum of 2.75 total credits

**Summer Semester**

| COOP*4000 [0.50] | Co-op Work Term IV |

**Semester 8 - Fall**

2.50 electives or restricted electives

**Restricted Electives**

1. Students must take as part of their program: 4.00 credits from the following list, with at least 1.00 of these credits from BIOC*4520, BIOC*4580, MCB*4050.

| BIOC*4520 [0.50] | Metabolic Processes |
| BIOC*4580 [0.50] | Membrane Biochemistry |
| BIOL*3300 [0.50] | Applied Bioinformatics |
| BIOM*3200 [1.00] | Biomedical Physiology |
| MBG*3040 [0.50] | Molecular Biology of the Gene |
| MBG*3080 [0.50] | Bacterial Genetics |
| MCB*3010 [0.50] | Dynamics of Cell Function and Signaling |
| MCB*4010 [0.50] | Advanced Cell Biology |
| MCB*4050 [0.50] | Protein and Nucleic Acid Structure |
| MCB*4500 [1.00] | Research Project in Molecular & Cellular Biology |
| MCB*4510 [1.00] | Research Project in Molecular & Cellular Biology |
| MCB*4600 [0.50] | Topics in Molecular and Cellular Biology |
| MICR*3230 [0.50] | Immunology |
| MICR*3330 [0.50] | World of Viruses |
| MICR*4330 [0.50] | Molecular Virology |
| MICR*4530 [0.50] | Immunology II |
| PBIO*3110 [0.50] | Crop Physiology |
| PBIO*4750 [0.50] | Genetic Engineering of Plants |
| STAT*2050 [0.50] | Statistics II |
| TOX*4590 [0.50] | Biochemical Toxicology |

2. Students must take as part of their program: 0.50 credits from the following list:

| PHYS*2030 [0.50] | Biophysics of Excitable Cells |
| PHYS*2240 [0.50] | Thermal Physics |
| PHYS*2330 [0.50] | Electricity and Magnetism I |
| PHYS*2600 [0.50] | General Astronomy |
| PHYS*3080 [0.50] | Energy |

**Sequence B**

**Semester 1 - Fall**

| BIOL*1090 [0.50] | Introduction to Molecular and Cellular Biology |
| CHEM*1040 [0.50] | General Chemistry I |
| MATH*1080 [0.50] | Elements of Calculus I |
| PHYS*1080 [0.50] | Physics for Life Sciences |

0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at https://www.uoguelph.ca/bsc/revised_SS

**Semester 2 - Winter**

| BIOL*1070 [0.50] | Discovering Biodiversity |
| BIOL*1080 [0.50] | Biological Concepts of Health |
| CHEM*1050 [0.50] | General Chemistry II |
| COOP*1100 [0.00] | Introduction to Co-operative Education |
| MATH*1090 [0.50] | Elements of Calculus II |

**Summer Semester**

No academic semester or work term

**Semester 3 - Fall**

| BIOL*2580 [0.50] | Introduction to Biochemistry |
| CHEM*2480 [0.50] | Analytical Chemistry I |
| CHEM*2880 [0.50] | Physical Chemistry |
| MBG*2040 [0.50] | Foundations in Molecular Biology and Genetics |

0.50 Liberal Education electives

**Winter Semester**

| COOP*1000 [0.50] | Co-op Work Term I |

**Semester 4 - Summer**

| BIOL*3570 [0.75] | Analytical Biochemistry |
| CHEM*2700 [0.50] | Organic Chemistry I |
| MICR*2420 [0.50] | Introduction to Microbiology |
| STAT*2040 [0.50] | Statistics I |

Electives or restricted electives to a maximum of 2.75 total credits

**Semester 5 - Fall**

| BIOL*3560 [0.50] | Structure and Function in Biochemistry |
| CHEM*3750 [0.50] | Organic Chemistry II |
| MCB*2050 [0.50] | Molecular Biology of the Cell |
| MICR*2430 [0.50] | Methods in Microbial Culture and Physiology |

0.50 Liberal Education electives

**Winter Semester**

| COOP*2000 [0.50] | Co-op Work Term II |

**Semester 6 - Winter**

| BIOL*3560 [0.50] | Structure and Function in Biochemistry |
| CHEM*3750 [0.50] | Organic Chemistry II |
| MICR*2420 [0.50] | Introduction to Microbiology |
| STAT*2040 [0.50] | Statistics I |

Electives or restricted electives to a maximum of 2.75 total credits

**Fall Semester**

| COOP*2000 [0.50] | Co-op Work Term II |

**Semester 7 - Winter**

| BIOL*3560 [0.50] | Structure and Function in Biochemistry |
| MCB*2050 [0.50] | Molecular Biology of the Cell |
| MICR*2430 [0.50] | Methods in Microbial Culture and Physiology |

1.00 electives or restricted electives

Last Revision: July 4, 2019
Summer Semester
COOP*3000 [0.50] Co-op Work Term III
Semester 6 - Fall
CHEM*3750 [0.50] Organic Chemistry II
2.00 electives or restricted electives
Semester 7 - Winter
BIOC*4540 [0.75] Enzymology
MBG*3350 [0.75] Laboratory Methods in Molecular Biology
1.00 electives or restricted electives
Semester Summer
COOP*4000 [0.50] Co-op Work Term IV
Semester 8 - Fall
2.50 electives or restricted electives
Restricted Electives
1. Students must take as part of their program: 4.00 credits from the following list, with at least 1.00 of these credits from BIOC*4520, BIOC*4580, MCB*4050.
BIOC*4520 [0.50] Metabolic Processes
BIOC*4580 [0.50] Membrane Biochemistry
BIOL*3300 [0.50] Applied Bioinformatics
BIOM*3200 [1.00] Biomedical Physiology
MBG*3040 [0.50] Molecular Biology of the Gene
MBG*3080 [0.50] Bacterial Genetics
MCB*3010 [0.50] Dynamics of Cell Function and Signaling
MCB*4010 [0.50] Advanced Cell Biology
MCB*4050 [0.50] Protein and Nucleic Acid Structure
MCP*4500 [1.00] Research Project in Molecular & Cellular Biology II
MCB*4510 [1.00] Research Project in Molecular & Cellular Biology
MCB*4600 [0.50] Topics in Molecular and Cellular Biology
MICR*3230 [0.50] Immunology
MICR*3330 [0.50] World of Viruses
MICR*4330 [0.50] Molecular Virology
MICR*4530 [0.50] Immunology II
PBIO*3110 [0.50] Crop Physiology
PBIO*4750 [0.50] Genetic Engineering of Plants
STAT*2050 [0.50] Statistics II
TOX*4590 [0.50] Biochemical Toxicology
2. Students must take as part of their program: 0.50 credits from the following list:
PHYS*2030 [0.50] Biophysics of Excitable Cells
PHYS*2240 [0.50] Thermal Physics
PHYS*2330 [0.50] Electricity and Magnetism I
PHYS*2600 [0.50] General Astronomy
PHYS*3080 [0.50] Energy

Biodiversity (BIOD)

Department of Integrative Biology, College of Biological Science

The Major in Biodiversity offers a broad education in the diversity and evolution of life while providing a more specialized understanding of biology at the level of the organism. It is the most flexible of the majors offered by the Department of Integrative Biology and as such, it allows students the opportunity to design a customized program around their interests. The major qualifies students for postgraduate work in biodiversity, botany, zoology, and other life sciences and provides a sound science background for students wishing to pursue professional life science degrees or careers in teaching, government service or the private sector.

Biodiversity impacts every aspect of our planet. To maximize a student’s exposure to biodiversity we strongly encourage students to consider an international exchange in their fifth semester. An increase in global awareness of the diverse issues facing biodiversity from different economic, social, environmental and biological landscapes will help students to critically think, analyze and recognize the inherent complexities within the field.

Major (Honours Program)

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. A minimum total of 20.00 credits required to complete the major.

Semester 1
BIOL*1070 [0.50] Discovering Biodiversity
CHEM*1040 [0.50] General Chemistry I
MATH*1080 [0.50] Elements of Calculus I
PHYS*1080 [0.50] Physics for Life Sciences
0.50 Liberal Education electives
Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at https://www.uoguelph.ca/bsc/revised_SS

Semester 2
BIOL*1080 [0.50] Biological Concepts of Health
BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
CHEM*1050 [0.50] General Chemistry II
PHYS*1070 [0.50] Physics for Life Sciences II
0.50 electives or restricted electives

Semester 3
BIOL*2580 [0.50] Introduction to Biochemistry
MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
MICR*2420 [0.50] Introduction to Microbiology
ZOO*2090 [0.50] Vertebrate Structure and Function
0.50 electives or restricted electives

Semester 4
BIOL*2060 [0.50] Ecology
BIOL*2400 [0.50] Evolution
STAT*2230 [0.50] Biostatistics for Integrative Biology
ZOO*2700 [0.50] Invertebrate Morphology & Evolution
0.50 electives or restricted electives

Semester 5
2.50 electives or restricted electives

* Restricted Electives

The major in Biodiversity is a flexible program that allows students, in consultation with faculty advisors, to pursue their own interests and design a customized program of study. For example, students may wish to select their electives to focus on a particular taxonomic group such as microbes, plants, invertebrates, or vertebrates, and/or one of the three areas of research strength in the Department of Integrative Biology: physiology, ecology, or evolution.

1. At least 1.00 credits of Liberal Education electives are required. The list of Liberal Education electives for B.Sc. students can be found at: https://www.uoguelph.ca/bsc

2. A minimum of 0.50 credits from:
   - BOT*2100 [0.50] Life Strategies of Plants
   - BOT*3050 [0.50] Plant Functional Ecology
   - ZOO*3600 [0.50] Comparative Animal Physiology I

3. A minimum of 0.50 credits from:
   - BOT*3310 [0.50] Plant Growth and Development
   - BOT*3410 [0.50] Plant Anatomy
   - ZOO*3605 [0.50] Developmental Biology

4. A minimum of 0.50 credits from the following list. Biodiversity students are strongly encouraged to take at least one field course. Students should keep in mind that some of these courses have prerequisites that are not required courses for the BIOD major and should plan their programs accordingly.
   - BIOL*4410 [0.75] Field Ecology
   - BIOL*4610 [0.75] Arctic Ecology
   - BIOL*4700 [0.50] Field Biology
   - BIOL*4710 [0.25] Field Biology
   - BIOL*4800 [0.50] Field Biology
   - BIOL*4810 [0.25] Field Biology
   - IBIO*4500 [1.00] Research in Integrative Biology I
   - IBIO*4510 [1.00] Research in Integrative Biology II
   - IBIO*4521/2 [2.00] Thesis in Integrative Biology
   - ZOO*4170 [0.50] Experimental Comparative Animal Physiology
   - ZOO*4300 [0.75] Marine Biology and Oceanography

Other field or research courses with approval of faculty advisor.

** Study Abroad can include an exchange, international letter of permission, semester abroad or field school. Full details on the institutions and experiences available, along with application deadlines and admission requirements can be found on the University of Guelph, Centre for International Programs website: https://www.uoguelph.ca/cip/

Credit Summary (20.00 Total Credits)

4.00 - First year science credits
6.50 - Required science courses semesters 3 - 8
1.50 - Restricted elective (# 2, 3 and 4 in restricted elective list)
4.00 - Approved Science electives
1.00 - Liberal Education (#1 in restricted electives)
Credit Summary (20.00 Total Credits)

5.00 - First year science credits
9.50 - Required science courses semesters 3 – 8
1.50 - Restricted electives (from List A OR List B)
1.00 - Liberal Education electives
3.00 - Free electives - any approved elective for B.Sc. students.

** List A: Biological Physics stream **

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS*3000</td>
<td>Optimics: Fundamentals and Applications</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MCB*4050</td>
<td>Protein and Nucleic Acid Structure</td>
<td>[0.50]</td>
</tr>
<tr>
<td>NANO*4100</td>
<td>Biological Nanomaterials</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MCB*2040</td>
<td>Foundations in Molecular Biology and Genetics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MBG*2040</td>
<td>Foundations in Molecular Biology and Genetics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENGG*4040</td>
<td>Medical Imaging Modalities</td>
<td>[0.50]</td>
</tr>
<tr>
<td>BIOM*2000</td>
<td>Concepts in Human Physiology</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PG**</td>
<td>Chosen from: PHYS<em>2050, PHYS</em>2070, PHYS*2100</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS**</td>
<td>Chosen from: PHYS<em>2000, PHYS</em>2070, PHYS*2100</td>
<td>[0.50]</td>
</tr>
<tr>
<td>IPS**</td>
<td>Chosen from: IPS<em>1500, PHYS</em>1080</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

** List B: Medical Physics stream **

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS*4001/2</td>
<td>Projects in biological or medical physics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*4002</td>
<td>Research in Physics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*4070</td>
<td>Clinical Applications of Physics in Medicine</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*4040</td>
<td>Research in Physics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*4130</td>
<td>Subatomic Physics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*4500</td>
<td>Advanced Physics Laboratory</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*4540</td>
<td>Molecular Biophysics</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*5000</td>
<td>Computational Methods in Materials Science</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*5170</td>
<td>Radioactivity and Radiation Interactions</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*5450</td>
<td>Advanced Physics Laboratory</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*5800</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*5900</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*6000</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*6100</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*6200</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*6300</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*6400</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*6500</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*6600</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*6700</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*6800</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*6900</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*7000</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*7100</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*7200</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*7300</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*7400</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*7500</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*7600</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*7700</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*7800</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*7900</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*8000</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*8100</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*8200</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*8300</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*8400</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*8500</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*8600</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*8700</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*8800</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*8900</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*9000</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*9100</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*9200</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*9300</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*9400</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*9500</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*9600</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*9700</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*9800</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*9900</td>
<td>Advanced Liberal Education electives</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

*Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fifth Co-op work term is optional and if completed, the total number of credits will equal 22.50.  

The recommended program sequence is outlined below.
### Major (Honours Program)

**Semester 1 - Fall**
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1040 [0.50] General Chemistry I
- CIS*1300 [0.50] Programming

1.00 credits from: IPS*1500, or (MATH*1080, PHYS*1080) or (MATH*1200, PHYS*1080)

* IPS*1500 is recommended

**Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at: [https://www.uoguelph.ca/bsc/revised SS](https://www.uoguelph.ca/bsc/revised SS)**

**Semester 2 - Winter**
- BIOL*1080 [0.50] Biological Concepts of Health
- CHEM*1050 [0.50] General Chemistry II
- MATH*1160 [0.50] Linear Algebra I

1.00 credits from: IPS*1510, or (MATH*1090, PHYS*1070) or (MATH*1210, PHYS*1010)

* IPS*1510 is recommended

**Semester 3 - Fall**
- COOP*1100 [0.00] Introduction to Co-operative Education
- MATH*2200 [0.50] Advanced Calculus I
- MATH*2270 [0.50] Applied Differential Equations
- PHYS*2240 [0.50] Thermal Physics
- PHYS*2330 [0.50] Electricity and Magnetism I

0.50 Liberal Education electives

**Semester 4 - Winter**
- BIOC*2580 [0.50] Introduction to Biochemistry
- PHYS*2030 [0.50] Biophysics of Excitable Cells
- PHYS*2180 [0.50] Experimental Techniques in Physics
- PHYS*2310 [0.50] Mechanics
- PHYS*2340 [0.50] Electricity and Magnetism II

**Summer Semester**
- COOP*1000 [0.50] Co-op Work Term I

**Semester 5 - Fall**
- PHYS*3130 [0.50] Mathematical Physics
- PHYS*3230 [0.50] Quantum Mechanics I

1.50 electives ***

**Winter Semester**
- COOP*2000 [0.50] Co-op Work Term II (8-month work term in conjunction with COOP*3000)

**Summer Semester**
- COOP*3000 [0.50] Co-op Work Term III (8-month work term in conjunction with COOP*2000)

**Semester 6 - Fall**
- IPS*3000 [0.50] Science Communication
- PHYS*3170 [0.50] Radioactivity and Radiation Interactions

1.50 electives ***

**Semester 7 - Winter**
- NANO*3600 [0.50] Computational Methods in Materials Science
- PHYS*3510 [0.50] Intermediate Laboratory
- PHYS*4040 [0.50] Quantum Mechanics II
- PHYS*4540 [0.50] Molecular Biophysics

0.50 electives ***

**Summer Semester**
- COOP*4000 [0.50] Co-op Work Term IV

**Fall Semester**
- COOP*5000 [0.50] Co-op Work Term V

**Semester 8 - Winter**
- PHYS*4070 [0.50] Clinical Applications of Physics in Medicine
- PHYS*4500 [0.50] Advanced Physics Laboratory

1.50 electives ***

**Students are required to complete 1.50 credits from either List A or List B as follows:**

### List A: Biological Physics stream
- BIOC*3560 [0.50] Structure and Function in Biochemistry
- BIOC*4580 [0.50] Membrane Biochemistry
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- MCB*2050 [0.50] Molecular Biology of the Cell
- MCB*4050 [0.50] Protein and Nucleic Acid Structure
- NANO*4100 [0.50] Biological Nanomaterials
- PHYS*3000 [0.50] Optics: Fundamentals and Applications

### List B: Medical Physics stream
- BIOM*2000 [0.50] Concepts in Human Physiology
- ENGG*4040 [0.50] Medical Imaging Modalities
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- PATH*3610 [0.50] Principles of Disease
- PHYS*3000 [0.50] Optics: Fundamentals and Applications
- PHYS*4130 [0.50] Subatomic Physics

---

### Biological and Pharmaceutical Chemistry (BPCH)

**Department of Chemistry, College of Engineering and Physical Sciences**

**Major (Honours Program)**

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. This major will require the completion of 20.00 credits as indicated below:

**Semester 1**
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1040 [0.50] General Chemistry I
- IPS*1500 [1.00] Integrated Mathematics and Physics I

0.50 Liberal Education electives

**Students who are lacking one 4U /grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at: [https://www.uoguelph.ca/bsc/revised SS](https://www.uoguelph.ca/bsc/revised SS)**

**Semester 2**
- CHEM*1050 [0.50] General Chemistry II
- IPS*1510 [1.00] Integrated Mathematics and Physics II

One of
- BIOL*1070 [0.50] Discovering Biodiversity
- BIOL*1080 [0.50] Biological Concepts of Health

0.50 Liberal Education electives

**Semester 3**
- BIOC*2580 [0.50] Introduction to Biochemistry
- CHEM*2060 [0.50] Structure and Bonding
- CHEM*2880 [0.50] Physical Chemistry

One of
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- STAT*2040 [0.50] Statistics I

0.50 electives or restricted electives

**Semester 4**
- CHEM*2070 [0.50] Structure and Spectroscopy
- CHEM*2700 [0.50] Organic Chemistry I
- CHEM*2400 [0.75] Analytical Chemistry I
- MICR*2420 [0.50] Introduction to Microbiology

One of
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- STAT*2040 [0.50] Statistics I

**Semester 5**
- BIOC*3570 [0.75] Analytical Biochemistry
- CHEM*3750 [0.50] Organic Chemistry II

One of:
- CHEM*3640 [0.50] Chemistry of the Elements I **

0.50 electives or restricted electives *

One of:
- TOX*3300 [0.50] Analytical Toxicology ***

0.50 electives or restricted electives *

Electives or restricted electives to a maximum of 2.75 total credits in this semester*

**CHEM*3640 is a prerequisite for CHEM*3650**

**TOX*3300 is a substitute for CHEM*3430 in Semester 6**

**Semester 6**

Select either Option A or Option B

**Option A (at Guelph)**
- BIOC*3560 [0.50] Structure and Function in Biochemistry
- CHEM*3430 [0.50] Analytical Chemistry II: Instrumental Analysis
- CHEM*3650 [0.50] Chemistry of the Elements II
- CHEM*3760 [0.50] Organic Chemistry III

0.50 electives or restricted electives *

**Option B (at Seneca)**
- XSEN*3200 [0.50] Pharmaceutical Organic Chemistry
- XSEN*3210 [0.50] Introduction to Pharmaceutical Manufacturing
- XSEN*3210 [0.50] Pharmaceutical Organic Chemistry
- XSEN*3210 [0.50] Introduction to Pharmaceutical Manufacturing

---

**Last Revision: July 4, 2019**

---

[2019-2020 Undergraduate Calendar](https://www.uoguelph.ca)
Note: All XSEN courses are taught at the Seneca@York campus of Seneca College in Toronto.

**Semester 7**
One of:
- CHEM*4730 [0.50] Synthetic Organic Chemistry
- CHEM*4740 [0.50] Topics in Bio-Orgainc Chemistry

2.00 electives or restricted electives *

**Semester 8**
2.50 electives or restricted electives *

* Restricted Electives

**Students are advised to pay particular attention to pre-requisite requirements when choosing individual courses, and seek advice as needed.

1. 0.50 credits from the following:
   - MCB*2050 [0.50] Molecular Biology of the Cell
   - TOX*2000 [0.50] Principles of Toxicology

2. A minimum of 1.50 credits at the 4000 level and 2.50 credits at the 3000/4000 level from the following list:
   - BIOC*3560 [0.50] Structure and Function in Biochemistry
   - BIOC*4520 [0.50] Metabolic Processes
   - BIOC*4540 [0.50] Enzymology **
   - BIOC*4580 [0.50] Membrane Biochemistry
   - BIOM*3090 [0.50] Principles of Pharmacology **
   - BIOM*3200 [1.00] Biomedical Physiology
   - BIOM*4090 [0.50] Pharmacology **
   - CHEM*3360 [0.50] Environmental Chemistry and Toxicology
   - CHEM*3440 [0.50] Analytical Chemistry III: Analytical Instrumentation
   - CHEM*3640 [0.50] Chemistry of the Elements I
   - CHEM*3650 [0.50] Chemistry of the Elements II **
   - CHEM*3760 [0.50] Organic Chemistry III
   - CHEM*4010 [0.50] Chemistry and Industry
   - CHEM*4400 [0.50] Advanced Topics in Analytical Chemistry
   - CHEM*4630 [0.50] Bioorganic Chemistry **
   - CHEM*4720 [0.50] Organic Reactivity **
   - CHEM*4730 [0.50] Synthetic Organic Chemistry **
   - CHEM*4740 [0.50] Topics in Bio-Orgainc Chemistry
   - CHEM*4900 [1.00] Chemistry Research Project I **
   - CHEM*4910 [1.00] Chemistry Research Project II **
   - MBG*3040 [0.50] Molecular Biology of the Gene **
   - MBG*3380 [0.75] Laboratory Methods in Molecular Biology **
   - MCB*4050 [0.50] Protein and Nucleic Acid Structure **
   - MICR*3230 [0.50] Immunology
   - NUTR*3210 [0.50] Fundamentals of Nutrition
   - PATH*3610 [0.50] Principles of Disease
   - TOX*4590 [0.50] Biochemical Toxicology **
   - XSEN*3030 [0.50] Pharmacology and Applied Toxicology
   - XSEN*3040 [0.50] Occupational Health and Chemistry
   - XSEN*3060 [0.50] Pharmaceutical Analysis - Advanced
   - XSEN*3070 [0.50] Pharmaceutical Product Formulations
   - XSEN*3090 [0.50] Biopharmaceuticals
   - XSEN*3200 [0.50] Pharmaceutical Organic Chemistry
   - XSEN*3210 [0.50] Introduction to Pharmaceutical Manufacturing

Credit Summary (20.00 Total Credits)*

4.00 - First year science credits
6.50 - Required science courses courses semesters 3 – 8
5.00 - Restricted electives (#1 and 2 in restricted electives list) 0.50 - Approved Science electives
1.00 - Liberal Education electives
3.00 - Free electives - any approved elective for B.Sc. students. (could be less if restricted electives do not count as science)

1.50 - Co-op Work Terms

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Note:** A fourth Co-op work term is optional and if completed, the total number of credits will equal 22.00.

The recommended program sequence is outlined below.

**Biological and Pharmaceutical Chemistry (Co-op) (BPCH:C)**
Department of Chemistry, College of Engineering and Physical Sciences

Program Requirements
The Co-op program in Biological and Pharmaceutical Chemistry is a four and a half year program, including four work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruituoguelph.ca/eccc/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>COOP*1100</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1000 Work Term I</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5</td>
<td>Academic Semester 6</td>
<td>COOP*2000 Work Term II</td>
</tr>
<tr>
<td>4</td>
<td>COOP*3000 Work Term III</td>
<td>Academic Semester 7</td>
<td>COOP*4000 Work Term IV</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

**Credit Summary (21.50 Total Credits)**

4.00 - First year science credits
6.00 - Required science courses courses semesters 3 – 8
5.50 - Restricted electives (#1 and #2 in restricted electives list)
1.00 - Liberal Education electives
3.00 - Free electives - any approved elective for B.Sc. students. (could be less if restricted electives do not count as science)

1.50 - Co-op Work Terms

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Note:** A fourth Co-op work term is optional and if completed, the total number of credits will equal 22.00.

The recommended program sequence is outlined below.

**Major (Honours Program)**

**Semester 1 - Fall**
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1040 [0.50] General Chemistry I
- IPS*1500 [1.00] Integrated Mathematics and Physics I
- 0.50 Liberal Education electives

Students who are lacking one 4U/grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at: https://www.uoguelph.ca/bsc/revised_sS

**Semester 2 - Winter**
- CHEM*1050 [0.50] General Chemistry II
- COOP*1100 [0.00] Introduction to Co-operative Education
- IPS*1510 [1.00] Integrated Mathematics and Physics II
- One of:
  - BIOL*1070 [0.50] Discovering Biodiversity
  - BIOL*1080 [0.50] Biological Concepts of Health
- 0.50 Liberal Education electives

**Semester 3 - Fall**
- BIOL*2580 [0.50] Introduction to Biochemistry
- CHEM*2060 [0.50] Structure and Bonding
- CHEM*2400 [0.75] Analytical Chemistry I
- CHEM*2880 [0.50] Physical Chemistry
- 0.50 electives or restricted electives to a maximum of 2.75 total credits in this semester*

**Winter Semester**
- COOP*1000 [0.50] Co-op Work Term I

**Semester 4 - Summer**
- CHEM*2070 [0.50] Structure and Spectroscopy
- CHEM*2700 [0.50] Organic Chemistry I
- CHEM*3340 [0.50] Analytical Chemistry II: Instrumental Analysis
- STAT*2040 [0.50] Statistics I
- 0.50 electives or restricted electives *

**Semester 5 - Fall**
- BIOL*3570 [0.75] Analytical Biochemistry
- CHEM*3750 [0.50] Organic Chemistry II
- One of:
### Chemistry of the Elements I
0.50 electives or restricted electives (CHEM*3640 is a prerequisite for CHEM*3650)

### Physics for Life Sciences

### General Chemistry I

### Synthetic Organic Chemistry

### Occupational Health and Chemistry

### Fundamentals of Nutrition

### Membrane Biochemistry

### Organic Reactivity

### Molecular Biology of the Cell

### Chemistry of the Elements II

### Biochemical Toxicology

### 1.00 credits from the following:

- [0.50] BIOC*3560: Structure and Function in Biochemistry
- [0.50] CHEM*3650: Chemistry of the Elements II
- [0.50] CHEM*3760: Organic Chemistry III

### 1.00 electives or restricted electives

### Option A (at Guelph) **

- [0.50] BIOL*3550: Structure and Function in Biochemistry
- [0.50] CHEM*3650: Chemistry of the Elements II
- [0.50] CHEM*3760: Organic Chemistry III

### Option B (at Seneca) **

#### Summer Semester

- [0.50] COOP*2000: Co-op Work Term II

#### Fall Semester

- [0.50] COOP*3000: Co-op Work Term III

#### Semester 7 - Winter

- [0.50] 2.50 electives or restricted electives

#### Summer Semester

- [0.50] COOP*4000: Co-op Work Term IV

#### Semester 8 - Fall

One of:

- [0.50] CHEM*4730: Synthetic Organic Chemistry
- [0.50] CHEM*4740: Topics in Bio-Organic Chemistry

### 2.00 electives or restricted electives

### * Restricted Electives

**Students are advised to pay particular attention to pre-requisite requirements when choosing individual courses, and seek advice as needed.

1. **MIRC*2420: Introduction to Microbiology**
2. 1.00 credits from the following:
   - [0.50] MBG*2040: Foundations in Molecular Biology and Genetics
   - [0.50] MCB*2050: Molecular Biology of the Cell
   - [0.50] TOX*2000: Principles of Toxicology
3. A minimum of 1.50 credits at the 4000 level and 2.50 credits at the 3000/4000 level from the following list:
   - [0.50] BIOC*3560: Structure and Function in Biochemistry
   - [0.50] BIOC*4520: Metabolic Processes
   - [0.50] BIOC*4540: Enzymology
   - [0.50] BIOC*4580: Membrane Biochemistry
   - [0.50] BIOM*3090: Principles of Pharmacology
   - [0.50] BIOM*3200: Biomedical Physiology
   - [0.50] BIOM*4090: Pharmacology
   - [0.50] CHEM*3360: Environmental Chemistry and Toxicology
   - [0.50] CHEM*3440: Analytical Chemistry III: Analytical Instrumentation
   - [0.50] CHEM*3640: Chemistry of the Elements I
   - [0.50] CHEM*3650: Chemistry of the Elements II
   - [0.50] CHEM*3760: Organic Chemistry III
   - [0.50] CHEM*4010: Chemistry and Industry
   - [0.50] CHEM*4090: Advanced Topics in Analytical Chemistry
   - [0.50] CHEM*4630: Bioinorganic Chemistry
   - [0.50] CHEM*4720: Organic Reactivity
   - [0.50] CHEM*4730: Synthetic Organic Chemistry
   - [0.50] CHEM*4740: Topics in Bio-Organic Chemistry
   - [1.00] CHEM*4900: Chemistry Research Project I
   - [1.00] CHEM*4910: Chemistry Research Project II
   - [0.50] MBG*3040: Molecular Biology of the Gene
   - [0.50] MBG*3350: Laboratory Methods in Molecular Biology
   - [0.50] MCB*4050: Protein and Nucleic Acid Structure
   - [0.50] MIRC*3230: Immunology
   - [0.50] NUTR*3210: Fundamentals of Nutrition
   - [0.50] PATH*3610: Principles of Disease
   - [0.50] TOX*4590: Biochemical Toxicology
   - [0.50] XSEN*3030: Pharmacology and Applied Toxicology

### 0.50 Liberal Education electives

### Biological Science (BIOS)

#### College of Biological Science

#### Major (Honours Program)

The Biological Science major offers the opportunity to study a wide range of topics within biological science. The major is one of the most flexible within the B.Sc. program. After the core sciences in first and second year, students can tailor the degree to create a major all their own. With the wide breadth of courses offered, students can choose to focus their studies in one area of biological science or create a unique skill set and combination of courses not currently offered in any one of our majors. Students can also add a minor in either an area of science, arts or social science.

With this flexibility, students in the Biological Science major are encouraged to seek out study abroad opportunities through the Centre for International Programs. With a high number of elective spaces within the major, students can incorporate a study abroad and still meet the degree requirements within four years. Students who wish to pursue this option should start researching and planning in semesters 3 and 4.

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. This major will require the completion of 20.00 credits as indicated below:

#### Schedule of Studies

##### Semester 1

- [0.50] BIOL*1090: Introduction to Molecular and Cellular Biology
- [0.50] CHEM*1040: General Chemistry I
- [0.50] MATH*1080: Elements of Calculus I
- [0.50] PHYS*1080: Physics for Life Sciences

0.50 Liberal Education electives

#### Semester 2

- [0.50] BIOL*1070: Discovering Biodiversity
- [0.50] BIOL*1080: Biological Concepts of Health
- [0.50] CHEM*1050: General Chemistry II
- [0.50] PHYS*1070: Physics for Life Sciences II

0.50 Liberal Education electives

#### Semester 3

- [0.50] BIOL*2400: Evolution

One of:

- [0.50] BIOC*2580: Introduction to Biochemistry
- [0.50] MBG*2040: Foundations in Molecular Biology and Genetics

1.00 electives or restricted electives

0.50 Liberal Education elective

#### Semester 4

- [0.50] STAT*2040: Statistics I

One of:

- [0.50] BIOC*2580: Introduction to Biochemistry
- [0.50] MBG*2040: Foundations in Molecular Biology and Genetics

1.00 electives or restricted electives

0.50 Liberal Education elective

#### Semester 5

2.50 credits of electives or restricted electives

Students are encouraged to consider study abroad options†

#### Semester 6

2.50 credits of electives or restricted electives

Students are encouraged to consider study abroad options†

#### Semester 7 and 8

2.50 credits of electives or restricted electives†

†Students interested in studying abroad need to apply in the year prior to going abroad.

Students need to contact the Centre for International Programs to confirm admission requirements and to submit an application. Study abroad requires approval from the appropriate individuals and is pending available space at the host institution.

### * Restricted Electives

** Note: some courses may require additional prerequisites.

1. At least 2.00 credits of Liberal Education electives are required. The list of Liberal Education electives for B.Sc. students can be found at: [https://www.ougalph.ca/bsc/](https://www.ougalph.ca/bsc/)

2. A minimum of 0.50 credits in Ecology: BIOL*2060 [0.50] Ecology
BSc. students who wish to declare the specialization at the end of or beyond first year must apply directly to the Department of Biomedical Sciences by the last day of classes in the winter semester and meet the same requirements specified above. Admission to the major will be based on the cumulative average in the two semesters (total of 5.00 credits) preceding application to the major (normally fall and winter). Acceptance will be competitive based on available spaces. Students with an average below 70% will not be considered for admission to the major. All decisions will be made at the end of June.

**Major (Honours Program)**

A minimum of 20.00 credits is required.

**Semester 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOI*1080</td>
<td>Biological Concepts of Health</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>General Chemistry I</td>
<td>0.50</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>Elements of Calculus I</td>
<td>0.50</td>
</tr>
<tr>
<td>PHYS*1080</td>
<td>Physics for Life Sciences</td>
<td>0.50</td>
</tr>
</tbody>
</table>

0.50 electives or restricted electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at: https://www.uoguelph.ca/bsc/revised_SS

**Semester 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOI*1070</td>
<td>Discovering Biodiversity</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOI*1090</td>
<td>Introduction to Molecular and Cellular Biology</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>General Chemistry II</td>
<td>0.50</td>
</tr>
<tr>
<td>PHYS*1070</td>
<td>Physics for Life Sciences II</td>
<td>0.50</td>
</tr>
</tbody>
</table>

0.50 electives or restricted electives

**Semester 3 (see admission statement above)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC*2580</td>
<td>Introduction to Biochemistry</td>
<td>0.50</td>
</tr>
<tr>
<td>MBG*2040</td>
<td>Foundations in Molecular Biology and Genetics</td>
<td>0.50</td>
</tr>
<tr>
<td>STAT*2040</td>
<td>Statistics I</td>
<td>0.50</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

**Semester 4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCB*2050</td>
<td>Molecular Biology of the Cell</td>
<td>0.50</td>
</tr>
<tr>
<td>NUTR*3210</td>
<td>Fundamentals of Nutrition</td>
<td>0.50</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOI*3200</td>
<td>Biomedical Physiology</td>
<td>1.00</td>
</tr>
<tr>
<td>HK*2810</td>
<td>Human Physiology I - Concepts and Principles</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Electives or restricted electives to a maximum of 2.50 total credits in this semester.

**Note:** If HK*2810 is selected, then HK*3810 must be taken in Semester 5.

**Semester 5**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC*3560</td>
<td>Structure and Function in Biochemistry</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Electives or restricted electives to a maximum of 2.75 total credits in this semester. BIOI*3210 is recommended.

**Note:** As part of the electives or restricted electives, students must select HK*3810 in semester 5 if HK*2810 was selected in semester 4.

**Semester 6**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOI*3090</td>
<td>Principles of Pharmacology</td>
<td>0.50</td>
</tr>
<tr>
<td>PATH*3610</td>
<td>Principles of Disease</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*3240</td>
<td>Epidemiology</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Electives or restricted electives to a maximum of 2.75 total credits in this semester.

**Semester 7**

2.50 electives or restricted electives

**Semester 8**

2.50 electives or restricted electives

**Restricted Electives**

1. Anatomy Elective: [1 of (BIOM*3010, BIOM*3040), HK*3401/2, HK*3501/2]

2. Immunology Elective: ANSC*4650 or MIRC*3230

3. Advanced Study Electives: 2.00 credits from BIOM*4030, BIOM*4050, BIOM*4070, BIOM*4090, BIOM*4110, BIOM*4150, BIOM*4180, BIOM*4300, BIOM*4500, BIOM*4510, BIOM*4521/2, HK*4070, HK*4230, HK*4340, HK*4360, HK*4371/2, HK*4441/2, HK*4460, NUTR*4320, NUTR*4360, NUTR*4510, TOX*4000

At least 2.00 credits of Liberal Education electives are required. The list of Liberal Education electives for BSc. students can be found at: https://www.uoguelph.ca/bsc/

**Credit Summary (20.00 Total Credits)**

4.00 - First year science core

3.50 - Required science courses semesters 3 - 8 (# 2, 3 and 4 in restricted elective list)

5.50 - Required Lawrence Honors Courses as prescribed by the Schedule of Studies (see below)

5.75 - Required science courses semesters 3 – 8 (with HK 2810,3810) or 5.50 (with BIOM 3200)

446

X. Degree Programs, Bachelor of Science (B.Sc.)
Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Biomedical Toxicology (BTOX)**

*Interdisciplinary Program, Departments of Biomedical Sciences, Chemistry, School of Environmental Sciences, Molecular and Cellular Biology*

**Major (Honours Program)**

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. A minimum of 20.00 credits are required for graduation.

**Semester 1**
- **BIOL*1090 [0.50]** Introduction to Molecular and Cellular Biology
- **CHEM*1040 [0.50]** General Chemistry I
- **MATH*1080 [0.50]** Elements of Calculus I
- **PHYS*1080 [0.50]** Physics for Life Sciences

0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at: [https://www.uoguelph.ca/bsc/revised_SS](https://www.uoguelph.ca/bsc/revised_SS)

**Semester 2**
- **BIOL*1080 [0.50]** Biological Concepts of Health
- **CHEM*1050 [0.50]** General Chemistry II
- **PHYS*1070 [0.50]** Physics for Life Sciences II
- **STAT*2040 [0.50]** Statistics I

0.50 Liberal Education electives

**Semester 3**
- **BIOC*2580 [0.50]** Introduction to Biochemistry
- **MBG*2040 [0.50]** Foundations in Molecular Biology and Genetics
- **TOX*2000 [0.50]** Principles of Toxicology

1.00 elective or Liberal Education electives

**Semester 4**
- **BIOM*3200 [1.00]** Biomedical Physiology
- **CHEM*2480 [0.50]** Analytical Chemistry I
- **CHEM*2700 [0.50]** Organic Chemistry I

0.50 electives or restricted electives*

**Semester 5**
- **BIOC*3560 [0.50]** Structure and Function in Biochemistry
- **MCB*2050 [0.50]** Molecular Biology of the Cell
- **NUTR*3210 [0.50]** Fundamentals of Nutrition
- **TOX*3300 [0.50]** Analytical Toxicology

0.50 electives or restricted electives*

**Semester 6**
- **BIOM*3900 [0.50]** Principles of Pharmacology
- **PATH*3610 [0.50]** Principles of Disease
- **TOX*3360 [0.50]** Environmental Chemistry and Toxicology

One of:
- **BIOM*3040 [0.75]** Medical Embryology
- **MBG*3350 [0.75]** Laboratory Methods in Molecular Biology

Electives or restricted electives to a maximum of 2.75 total credits in this semester

**Semester 7**
- **NUTR*4510 [0.50]** Toxicology, Nutrition and Food
- **TOX*4000 [0.50]** Medical Toxicology
- **TOX*4590 [0.50]** Biochemical Toxicology

1.00 electives or restricted electives*

**Semester 8**
- **BIOM*4090 [0.50]** Pharmacology
- **TOX*4100 [0.50]** Toxicological Pathology
- **TOX*4200 [0.50]** Topics in Toxicology

1.00 electives or restricted electives*

* **Restricted Electives**

At least 1.50 credits must be completed from the following list of allowable courses.

**Students are advised to pay particular attention to pre-requisite requirements when choosing individual courses, and seek advice as needed.**

- **ANSC*4650 [0.50]** Comparative Immunology
- **BIOM*3040 [0.75]** Medical Embryology
- **BIOM*4050 [0.50]** Biomedical Aspects of Aging
- **BIOM*4070 [0.50]** Biomedical Histology
- **BIOM*4150 [0.50]** Cancer Biology
- **CHEM*3750 [0.50]** Organic Chemistry II
- **CHEM*3760 [0.50]** Organic Chemistry III
- **CHEM*4740 [0.50]** Topics in Bio-Organic Chemistry
- **MBG*3040 [0.50]** Molecular Biology of the Gene
- **MBG*3350 [0.75]** Laboratory Methods in Molecular Biology
- **MBG*4270 [0.50]** DNA Replication, Recombination and Repair

**Credit Summary (20.00 Total Credits)**

4.00 - First year science credits
10.75 - Required science courses semesters 3 – 8
1.50 - Restricted electives
1.50 - Liberal Education electives
2.25 - Free electives - any approved elective for B.Sc. students

Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Biomedical Toxicology (Co-op) (BTOX:C)**

*Interdisciplinary Program, Departments of Biomedical Sciences, Chemistry, School of Environmental Sciences, Molecular and Cellular Biology*

**Program Requirements**

The Co-op program in Biomedical Toxicology is a four and a half year program, including four work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: [https://www.recruitguelph.ca/cecs/](https://www.recruitguelph.ca/cecs/)). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Biomedical Toxicology Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>COOP*1100</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1000 Work Term I</td>
<td>COOP*2000 Work Term II</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 4</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>COOP*4000 Work Term IV</td>
<td>Academic Semester</td>
<td>Off</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education website.

**Credit Summary (21.50 Total Credits)**

4.00 - First year science credits
10.75 - Required science courses semesters 3 – 8
1.50 - Restricted electives
1.50 - Liberal Education electives
2.25 - Free electives - any approved elective for B.Sc. students
1.50 - Co-op Work Terms

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Note:** A minimum of three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fourth Co-op work term is optional and if completed, the total number of credits will equal 22.00.*

The recommended program sequence is outlined below.

**Major (Honours Program)**

**Semester 1 - Fall**
- **BIOL*1090 [0.50]** Introduction to Molecular and Cellular Biology
- **CHEM*1040 [0.50]** General Chemistry I
- **MATH*1080 [0.50]** Elements of Calculus I
- **PHYS*1080 [0.50]** Physics for Life Sciences

0.50 Liberal Education electives
Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at: https://www.uoguelph.ca/bsc/revised_SS

<table>
<thead>
<tr>
<th>Semester 2 - Winter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1080 [0.50]</td>
<td>Biological Concepts of Health</td>
<td></td>
</tr>
<tr>
<td>CHEM*1050 [0.50]</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>COOP*1100 [0.00]</td>
<td>Introduction to Co-operative Education</td>
<td></td>
</tr>
<tr>
<td>PHYS*1070 [0.50]</td>
<td>Physics for Life Sciences II</td>
<td></td>
</tr>
<tr>
<td>STAT*2040 [0.50]</td>
<td>Statistics I</td>
<td></td>
</tr>
<tr>
<td>0.50 Liberal Education electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 3 - Fall</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC*2580 [0.50]</td>
<td>Introduction to Biochemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM*2480 [0.50]</td>
<td>Analytical Chemistry I</td>
<td></td>
</tr>
<tr>
<td>MBG*2040 [0.50]</td>
<td>Foundations in Molecular Biology and Genetics</td>
<td></td>
</tr>
<tr>
<td>TOX*2000 [0.50]</td>
<td>Principles of Toxicology</td>
<td></td>
</tr>
<tr>
<td>0.50 Liberal Education electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 4 - Fall</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC*3560 [0.50]</td>
<td>Structure and Function in Biochemistry</td>
<td></td>
</tr>
<tr>
<td>MCB*2050 [0.50]</td>
<td>Molecular Biology of the Cell</td>
<td></td>
</tr>
<tr>
<td>NUTR*3210 [0.50]</td>
<td>Fundamentals of Nutrition</td>
<td></td>
</tr>
<tr>
<td>TOX*3300 [0.50]</td>
<td>Analytical Toxicology</td>
<td></td>
</tr>
<tr>
<td>0.50 electives or restricted electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 5 - Winter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*2700 [0.50]</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>BIOM*3200 [1.00]</td>
<td>Biomedical Physiology</td>
<td></td>
</tr>
<tr>
<td>TOX*3360 [0.50]</td>
<td>Environmental Chemistry and Toxicology</td>
<td></td>
</tr>
<tr>
<td>0.50 electives or restricted electives*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 6 - Winter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOM*3090 [0.50]</td>
<td>Principles of Pharmacology</td>
<td></td>
</tr>
<tr>
<td>PATH*3610 [0.50]</td>
<td>Principles of Disease</td>
<td></td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOM*3040 [0.75]</td>
<td>Medical Embryology</td>
<td></td>
</tr>
<tr>
<td>MBG*3350 [0.75]</td>
<td>Laboratory Methods in Molecular Biology</td>
<td></td>
</tr>
<tr>
<td>Electives or restricted electives to a maximum of 2.75 total credits in this semester</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 7 - Fall</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR*4510 [0.50]</td>
<td>Toxicology, Nutrition and Food</td>
<td></td>
</tr>
<tr>
<td>TOX*4000 [0.50]</td>
<td>Medical Toxicology</td>
<td></td>
</tr>
<tr>
<td>TOX*4590 [0.50]</td>
<td>Biochemical Toxicology</td>
<td></td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOM*4090 [0.50]</td>
<td>Pharmacology</td>
<td></td>
</tr>
<tr>
<td>TOX*4900 [1.00]</td>
<td>Toxicology Research Project I</td>
<td></td>
</tr>
<tr>
<td>1.00 electives or restricted electives*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 8 - Winter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOM*4090 [0.50]</td>
<td>Pharmacology (if not taken in Semester 7)</td>
<td></td>
</tr>
<tr>
<td>TOX*4100 [0.50]</td>
<td>Toxicological Pathology</td>
<td></td>
</tr>
<tr>
<td>TOX*4200 [0.50]</td>
<td>Topics in Toxicology</td>
<td></td>
</tr>
<tr>
<td>Electives or restricted electives* to 2.50 credits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Electives*  

At least 1.50 credits must be completed from the following list of allowable courses.  

**Students are advised to pay particular attention to pre-requisite requirements when choosing individual courses, and seek advice as needed.**

- ANSC*4650 [0.50] Comparative Immunology  
- BIOM*3040 [0.75] Medical Embryology  
- BIOM*4050 [0.50] Biomedical Aspects of Aging  
- BIOM*4070 [0.50] Biomedical Histology  
- BIOM*4150 [0.50] Cancer Biology  
- CHEM*3750 [0.50] Organic Chemistry II  
- CHEM*3760 [0.50] Organic Chemistry III  
- CHEM*4740 [0.50] Topics in Bio-Organic Chemistry  
- MBG*3040 [0.50] Molecular Biology of the Gene  
- MBG*3350 [0.75] Laboratory Methods in Molecular Biology  
- MBG*4270 [0.50] DNA Replication, Recombination and Repair  
- MCB*4010 [0.50] Advanced Cell Biology  
- MCR*3230 [0.50] Immunology  
- NUTR*4090 [0.50] Functional Foods and Nutraceuticals  
- NUTR*4320 [0.50] Nutrition and Metabolic Control of Disease  
- PATH*3040 [0.50] Principles of Parasitology  
- POPM*3240 [0.50] Epidemiology  
- POPM*4040 [0.50] Epidemiology of Food-borne Diseases  
- STAT*2050 [0.50] Statistics II  
- STAT*3510 [0.50] Environmental Risk Assessment  
- TOX*4900 [1.00] Toxicology Research Project I  
- TOX*4910 [1.00] Toxicology Research Project II  

### Biotechnology (BIOT)

Department of Molecular and Cellular Biology, College of Biological Science  

**Minor (Honours Program)**  

A minimum of 5.00 credits is required including:  

- BIOC*3560 [0.50] Structure and Function in Biochemistry  
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics  
- MCR*2420 [0.50] Introduction to Microbiology  
- MCR*2430 [0.50] Methods in Microbial Culture and Physiology  

0.50 credits from:  

- ENGG*2660 [0.50] Biological Engineering Systems I  
- ENGG*3830 [0.50] Bio-Process Engineering  
- FOOD*2410 [0.50] Introduction to Food Processing  
- FOOD*2420 [0.50] Introduction to Food Microbiology  
- FOOD*2620 [0.50] Food Engineering Principles  

1.00 credits from:  

- ECON*1050 [0.50] Introductory Microeconomics  
- ECON*1100 [0.50] Introductory Macroeconomics  
- ECON*2100 [0.50] Economic Growth and Environmental Quality  
- ECON*2310 [0.50] Intermediate Microeconomics  
- ECON*2410 [0.50] Intermediate Macroeconomics  
- MCS*1000 [0.50] Introductory Marketing  

A minimum of 1.50 credits from:  

- ANSC*4050 [0.50] Biotechnology in Animal Science  
- BIOC*4540 [0.75] Enzymology  
- BIOL*3300 [0.50] Applied Bioinformatics  
- FOOD*3270 [0.50] Industrial Microbiology  
- MBG*3660 [0.50] Genomics  
- MBG*4240 [0.50] Applied Molecular Genetics in Medicine and Biotechnology  
- MCB*4050 [0.50] Protein and Nucleic Acid Structure  
- MCR*3230 [0.50] Immunology  
- PIBIO*3750 [0.50] Plant Tissue Culture  
- PIBIO*4750 [0.50] Genetic Engineering of Plants  

### Business Economics (BECN)

Department of Economics and Finance, Gordon S. Lang School of Business and Economics  

Interdisciplinary study in Business Economics is offered as a minor in the honours program. Students in this program will be counselled by the Department of Economics and Finance. It is possible for students to pursue a more intensive program in the area of business and economics; see the heading Economics (ECON) or Mathematical Economics (MAEC) in the B.A. degree and the heading Management Economics (MEF) in the B.Comm. degree.  

**Minor (Honours Program)**  

A minimum of 5.00 credits is required, including:  

- ACCT*1220 [0.50] Introductory Financial Accounting  
- ACCT*2230 [0.50] Management Accounting  
- ECON*1050 [0.50] Introductory Microeconomics *  
- ECON*1100 [0.50] Introductory Macroeconomics  
- ECON*2310 [0.50] Intermediate Microeconomics  
- ECON*2410 [0.50] Intermediate Macroeconomics  
- ECON*2560 [0.50] Introduction to Finance  

One of:  

- IPS*1500 [1.00] Integrated Mathematics and Physics I  
- MATH*1030 [0.50] Business Mathematics  
- MATH*1080 [0.50] Elements of Calculus I  
- MATH*1200 [0.50] Calculus I  

One of:  

- ECON*2740 [0.50] Economic Statistics  
- PSYC*1010 [0.50] Making Sense of Data in Psychological Research  
- SOAN*2120 [0.50] Introductory Methods  
- STAT*2040 [0.50] Statistics I  
- STAT*2060 [0.50] Statistics for Business Decisions  
- STAT*2080 [0.50] Introductory Applied Statistics I  
- STAT*2120 [0.50] Probability and Statistics for Engineers  

One of:  

- ECON*3660 [0.50] Investments  
- ECON*4400 [0.50] Managerial Economics  

[Last Revision: July 4, 2019]
Chemical Physics (CHPY)

Administered by the Office of the Dean, College of Engineering and Physical Sciences on behalf of the Department of Chemistry and the Department of Physics

Major (Honours Program)

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. A minimum of 20.00 credits is required. At least 1.00 credits must be from Liberal Education electives.

Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*1040</td>
<td>[0.50]</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CTS*1300</td>
<td>[0.50]</td>
<td>Programming</td>
</tr>
<tr>
<td>IPS*1500</td>
<td>[1.00]</td>
<td>Integrated Mathematics and Physics I</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL*1070</td>
<td>[0.50]</td>
<td>Discovering Biodiversity</td>
</tr>
<tr>
<td>BIOL*1080</td>
<td>[0.50]</td>
<td>Biological Concepts of Health</td>
</tr>
<tr>
<td>BIOL*1090</td>
<td>[0.50]</td>
<td>Introduction to Molecular and Cellular Biology</td>
</tr>
</tbody>
</table>

Students who are lacking one 4U /grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at: https://www.uoguelph.ca/bsc/revised_SS

Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*1050</td>
<td>[0.50]</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>IPS*1510</td>
<td>[1.00]</td>
<td>Integrated Mathematics and Physics II</td>
</tr>
<tr>
<td>MATH*1160</td>
<td>[0.50]</td>
<td>Linear Algebra I</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL*1070</td>
<td>[0.50]</td>
<td>Discovering Biodiversity</td>
</tr>
<tr>
<td>BIOL*1080</td>
<td>[0.50]</td>
<td>Biological Concepts of Health</td>
</tr>
<tr>
<td>BIOL*1090</td>
<td>[0.50]</td>
<td>Introduction to Molecular and Cellular Biology</td>
</tr>
</tbody>
</table>

Semester 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*2060</td>
<td>[0.50]</td>
<td>Structure and Bonding</td>
</tr>
<tr>
<td>MATH*2200</td>
<td>[0.50]</td>
<td>Advanced Calculus I</td>
</tr>
<tr>
<td>MATH*2270</td>
<td>[0.50]</td>
<td>Applied Differential Equations</td>
</tr>
<tr>
<td>PHYS*2330</td>
<td>[0.50]</td>
<td>Electricity and Magnetism I</td>
</tr>
<tr>
<td>0.50 Liberal Education electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*2070</td>
<td>[0.50]</td>
<td>Structure and Spectroscopy</td>
</tr>
<tr>
<td>CHEM*2480</td>
<td>[0.50]</td>
<td>Analytical Chemistry I</td>
</tr>
<tr>
<td>PHYS*2180</td>
<td>[0.50]</td>
<td>Experimental Techniques in Physics</td>
</tr>
<tr>
<td>PHYS*2310</td>
<td>[0.50]</td>
<td>Mechanics</td>
</tr>
<tr>
<td>PHYS*2340</td>
<td>[0.50]</td>
<td>Electricity and Magnetism II</td>
</tr>
</tbody>
</table>

Semester 5

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*3860</td>
<td>[0.50]</td>
<td>Quantum Chemistry</td>
</tr>
<tr>
<td>PHYS*3130</td>
<td>[0.50]</td>
<td>Mathematical Physics</td>
</tr>
<tr>
<td>PHYS*3230</td>
<td>[0.50]</td>
<td>Quantum Mechanics I</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM*2820</td>
<td>[0.50]</td>
<td>Thermodynamics and Kinetics</td>
</tr>
<tr>
<td>PHYS*2240</td>
<td>[0.50]</td>
<td>Thermal Physics</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPS*3000</td>
<td>[0.50]</td>
<td>Science Communication</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*3430</td>
<td>[0.50]</td>
<td>Analytical Chemistry II: Instrumental Analysis</td>
</tr>
<tr>
<td>NANO*3600</td>
<td>[0.50]</td>
<td>Computational Methods in Materials Science</td>
</tr>
<tr>
<td>PHYS*3000</td>
<td>[0.50]</td>
<td>Optics: Fundamentals and Applications</td>
</tr>
<tr>
<td>PHYS*4040</td>
<td>[0.50]</td>
<td>Quantum Mechanics II</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM*3870</td>
<td>[0.50]</td>
<td>Molecular Spectroscopy</td>
</tr>
<tr>
<td>CHEM*4880</td>
<td>[0.50]</td>
<td>Topics in Advanced Physical Chemistry</td>
</tr>
</tbody>
</table>

Semester 7

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*3440</td>
<td>[0.50]</td>
<td>Analytical Chemistry III: Analytical Instrumentation</td>
</tr>
<tr>
<td>PHYS*4120</td>
<td>[0.50]</td>
<td>Atomic and Molecular Physics</td>
</tr>
<tr>
<td>PHYS*4240</td>
<td>[0.50]</td>
<td>Statistical Physics II</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS*4001</td>
<td>[0.50]</td>
<td>Research in Physics +</td>
</tr>
<tr>
<td>0.50 electives +</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semester 8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM*3870</td>
<td>[0.50]</td>
<td>Molecular Spectroscopy</td>
</tr>
<tr>
<td>CHEM*4880</td>
<td>[0.50]</td>
<td>Topics in Advanced Physical Chemistry</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM*4900</td>
<td>[1.00]</td>
<td>Chemistry Research Project I +</td>
</tr>
<tr>
<td>PHYS*4002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. A fifth Co-op work term is optional and if completed, the total number of credits will equal 22.50.

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (22.00 Total Credits)

5.00 - First year science credits
11.50 - Required science courses semesters 3 – 8
1.00 - Liberal Education electives
2.50 - Free electives - any approved elective for B.Sc. students

Chemical Physics Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>COOP*4000 Work Term IV</td>
<td>COOP*5000 Work Term V</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Chemical Physics (Co-op) (CHPY:C)

Administered by the Office of the Dean, College of Engineering and Physical Sciences on behalf of the Department of Chemistry and the Department of Physics

Program Requirements

The Co-op program in Chemical Physics is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Credit Summary (22.00 Total Credits)*

5.00 - First year science credits
10.50 - Required science courses semesters 3 – 8
0.50 – Approved science electives
1.00 - Liberal Education electives
3.00 - Free electives - any approved elective for B.Sc. students
2.00 - Co-op Work Terms

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. A fifth Co-op work term is optional and if completed, the total number of credits will equal 22.50.

The recommended program sequence is outlined below.

Major (Honours Program)

Semester 1 - Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM*1040</td>
<td>[0.50]</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CIS*1300</td>
<td>[0.50]</td>
<td>Programming</td>
</tr>
</tbody>
</table>
IPS*1500 [1.00] Integrated Mathematics and Physics I
One of:
Biol*1070 [0.50] Discovering Biodiversity
Biol*1080 [0.50] Biological Concepts of Health
Biol*1090 [0.50] Introduction to Molecular and Cellular Biology
Students who are lacking one 4U /grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at: https://www.uoguelph.ca/bsc/revised_SS
Semester 2 - Winter
CHEM*1050 [0.50] General Chemistry II
IPS*1510 [1.00] Integrated Mathematics and Physics II
Math*1160 [0.50] Linear Algebra I
One of:
Biol*1070 [0.50] Discovering Biodiversity
Biol*1080 [0.50] Biological Concepts of Health
Biol*1090 [0.50] Introduction to Molecular and Cellular Biology
Semester 3 - Fall
CHEM*2060 [0.50] Structure and Bonding
COOP*1100 [0.00] Introduction to Co-operative Education
MATH*2200 [0.50] Advanced Calculus I
MATH*2270 [0.50] Applied Differential Equations
Phys*2330 [0.50] Electricity and Magnetism I
0.50 Liberal Education electives
Semester 4 - Winter
CHEM*2070 [0.50] Structure and Spectroscopy
CHEM*2480 [0.50] Analytical Chemistry I
Phys*2180 [0.50] Experimental Techniques in Physics
Phys*2310 [0.50] Mechanics
Phys*2340 [0.50] Electricity and Magnetism II
Summer Semester
COOP*1000 [0.50] Co-op Work Term I
Fall Semester
COOP*2000 [0.50] Co-op Work Term II
Semester 5 - Winter
CHEM*3430 [0.50] Analytical Chemistry II: Instrumental Analysis
One of:
CHEM*3870 [0.50] Molecular Spectroscopy +
0.50 electives *
One of:
CIS*2500 [0.50] Intermediate Programming
0.50 electives *
1.00 electives*
Summer Semester
COOP*3000 [0.50] Co-op Work Term III
Semester 6 - Fall
CHEM*3860 [0.50] Quantum Chemistry
IPS*3000 [0.50] Science Communication
Phys*3130 [0.50] Mathematical Physics
Phys*3230 [0.50] Quantum Mechanics I
One of:
CHEM*2820 [0.50] Thermodynamics and Kinetics
Phys*2240 [0.50] Thermal Physics
Winter Semester
COOP*4000 [0.50] Co-op Work Term IV
(8-month work term in conjunction with COOP*5000)
Summer Semester
COOP*5000 [0.50] Co-op Work Term V
(8-month work term in conjunction with COOP*4000)
Semester 7** - Fall
CHEM*3340 [0.50] Analytical Chemistry III: Analytical Instrumentation
Phys*4240 [0.50] Statistical Physics II
One of:
CHEM*3640 [0.50] Chemistry of the Elements I
CHEM*3750 [0.50] Organic Chemistry II
0.50 electives *
1.00 electives *
Semester 8** - Winter
Nano*3600 [0.50] Computational Methods in Materials Science
Phys*3000 [0.50] Optics: Fundamentals and Applications
Phys*4040 [0.50] Quantum Mechanics II
One of:
CHEM*3870 [0.50] Molecular Spectroscopy +
CHEM*4880 [0.50] Topics in Advanced Physical Chemistry +
0.50 electives *
0.50 electives *
* A minimum of 1.00 credits of Liberal Education electives is required for completion of this program. The list of Liberal Education electives for B.Sc. students can be found at: https://www.uoguelph.ca/bsc/
** A minimum of 2.00 credits in science courses at the 4000 level is required for graduation.
+ One of CHEM*3870 or CHEM*4880 is required for graduation.

Chemistry (CHEM)

Department of Chemistry, College of Engineering and Physical Sciences

Major (Honours Program)

Students may enter this major in Semester I or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. The major will require the completion of 20.00 credits as indicated below:

Semester 1
BIOl*1090 [0.50] Introduction to Molecular and Cellular Biology
CHEM*1040 [0.50] General Chemistry I
IPS*1500 [1.00] Integrated Mathematics and Physics I
0.50 Liberal Education electives

Semester 2
CHEM*1050 [0.50] General Chemistry II
IPS*1510 [1.00] Integrated Mathematics and Physics II
Math*1160 [0.50] Linear Algebra I
One of:
BIOl*1070 [0.50] Discovering Biodiversity
BIOl*1080 [0.50] Biological Concepts of Health
BIOl*1090 [0.50] Introduction to Molecular and Cellular Biology

Semester 3
BIOC*2580 [0.50] Introduction to Biochemistry
CHEM*2060 [0.50] Structure and Bonding
CHEM*2400 [0.75] Analytical Chemistry I
MATH*2270 [0.50] Applied Differential Equations
Electives to a maximum of 2.75 total credits in this semester *

Semester 4
CHEM*2070 [0.50] Structure and Spectroscopy
CHEM*2700 [0.50] Organic Chemistry I
CHEM*3430 [0.50] Analytical Chemistry II: Instrumental Analysis
1.00 electives* or restricted electives**

Semester 5
CHEM*2820 [0.50] Thermodynamics and Kinetics
CHEM*3640 [0.50] Chemistry of the Elements I
CHEM*3750 [0.50] Organic Chemistry II
CHEM*3860 [0.50] Quantum Chemistry
0.50 electives*

Semester 6
CHEM*3650 [0.50] Chemistry of the Elements II
CHEM*3760 [0.50] Organic Chemistry III
1.50 electives* or restricted electives**

Semester 7 and 8
CHEM*3440 [0.50] Analytical Chemistry III: Analytical Instrumentation
3.00 Chemistry or Biochemistry**
1.50 electives*
*selection of electives is subject to the following:
1. At least 1.00 credits of Liberal Education electives are required. The list of Liberal Education electives for B.Sc. students can be found at: https://www.uoguelph.ca/bsc/
2. Approval of the Faculty Advisor must be obtained for the selection of courses not listed as restrictive electives.
3. Options for an "Area of Focus" or a minor are available. Subject areas include Biochemistry, Computing and Information Science, Earth Sciences, Environmental Sciences, Mathematical Sciences, and Physics. Please consult with your Faculty Advisor for more detail.

** A minimum of 3.00 credits from the 3000/4000 level as follows:
1. 1.50 comprising of (CHEM*3870 or CHEM*4880), (CHEM*4620 or CHEM*4630), (CHEM*4720 or CHEM*4730)
2. 1.50 chosen from CHEM*3870, CHEM*4010, CHEM*4400, BIOC*4520, BIOC*4540, BIOC*4580, CHEM*4620, CHEM*4630, CHEM*4720, CHEM*4730, CHEM*4740, CHEM*4880, CHEM*4900, CHEM*4910, MCB*4050, MCB*4080, TOX*4590

2019-2020 Undergraduate Calendar
Last Revision: July 4, 2019
Note:
1. Some of these courses may have to be taken in Semester 6.
2. Some of these courses are offered only in alternate years, and some have additional prerequisites for which the student must plan ahead, with the assistance of the faculty advisor.

Credit Summary (20.00 Total Credits)
4.50 - First year science credits
7.25 - Required science courses semesters 3 – 8
3.00 - Restricted electives (#1 and 2 in restricted electives list)
1.25 – Approved science electives
1.00 - Liberal Education electives
3.00 - Free electives - any approved elective for B.Sc. students.

Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

Minor (Honours Program)
A minor in Chemistry consists of at least 5.00 credits including the following courses:
CHEM*1040 [0.50] General Chemistry I
CHEM*1050 [0.50] General Chemistry II
Of the additional 4.00 credits, students will select Chemistry courses (CHEM) at the 2000 level or above including a minimum of 1.00 credits at the 3000 or 4000 level. BIOC*2580 can be counted towards this specialization

Chemistry (Co-op) (CHEM:C)
Department of Chemistry, College of Engineering and Physical Sciences
Program Requirements
The Co-op program in Chemistry is a four and a half year program including four work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruituoguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Chemistry Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>COOP*1100</td>
</tr>
<tr>
<td></td>
<td>Academic Semester 2</td>
<td>COOP*1100</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1000 Winter Term I</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7</td>
<td>COOP*4000 Work Term IV</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (21.50 Total Credits)*
4.50 - First year science credits
7.25 - Required science courses semesters 3 – 8
3.00 - Restricted electives (#1 and 2 in restricted electives list)
1.25 – Approved science electives
1.00 - Liberal Education electives
3.00 - Free electives - any approved elective for B.Sc. students.
1.50 - Co-op Work Terms

Note: A minimum of three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fourth Co-op work term is optional and if completed, the total number of credits will equal 22.00.

The recommended program sequence is outlined below.

Major (Honours Program)
Semester 1 - Fall
BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
CHEM*1040 [0.50] General Chemistry I
IPS*1500 [1.00] Integrated Mathematics and Physics I
0.50 Liberal Education electives

Students who are lacking one 4U /grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at: https://www.uoguelph.ca/bSc/revised_SS

Semester 2 - Winter
CHEM*1050 [0.50] General Chemistry II
COOP*1100 [0.00] Introduction to Co-operative Education
IPS*1510 [1.00] Integrated Mathematics and Physics II
MATH*1160 [0.50] Linear Algebra I
One of
BIOL*1070 [0.50] Discovering Biodiversity
BIOL*1080 [0.50] Biological Concepts of Health

Semester 3 - Fall
BIOC*2580 [0.50] Introduction to Biochemistry
CHEM*2060 [0.50] Structure and Bonding
CHEM*2400 [0.75] Analytical Chemistry I
MATH*2270 [0.50] Applied Differential Equations

Electives to a maximum of 2.75 total credits in this semester *

Winter Semester
COOP*1000 [0.50] Co-op Work Term I

Semester 4 - Summer
CHEM*2070 [0.50] Structure and Spectroscopy
CHEM*2700 [0.50] Organic Chemistry I
CHEM*3430 [0.50] Analytical Chemistry II: Instrumental Analysis
1.00 electives *

Semester 5 - Fall
CHEM*2820 [0.50] Thermodynamics and Kinetics
CHEM*3640 [0.50] Chemistry of the Elements I
CHEM*3750 [0.50] Organic Chemistry II
CHEM*3860 [0.50] Quantum Chemistry
0.50 electives *

Semester 6 - Winter
CHEM*3650 [0.50] Chemistry of the Elements II
CHEM*3760 [0.50] Organic Chemistry III
1.50 electives* or restricted electives**

Summer Semester
COOP*2000 [0.50] Co-op Work Term II

Fall Semester
COOP*3000 [0.50] Co-op Work Term III

Semester 7 - Winter
2.50 electives* or restricted electives**

Summer Semester
COOP*4000 [0.50] Co-op Work Term IV

Semester 8 - Fall
CHEM*3440 [0.50] Analytical Chemistry III: Analytical Instrumentation
2.00 electives* or restricted electives**

* selection of electives is subject to the following:
1. At least 1.00 credits of Liberal Education electives are required. The list of Liberal Education electives for B.Sc. students can be found at: https://www.uoguelph.ca/bSc/
2. Approval of the Faculty Advisor must be obtained for the selection of courses not listed as restrictive electives.
3. Options for an “Area of Focus” or a minor are available. Subject areas include Biochemistry, Computing and Information Science, Earth Sciences, Environmental Sciences, Mathematical Sciences, and Physics. Please consult with your Faculty Advisor for more detail.

** 3.00 credits from the 3000/4000 level as follows:
1. 1.50 comprising of (CHEM*3870 or CHEM*4880), (CHEM*4620 or CHEM*4630), (CHEM*4720 or CHEM*4730)
2. 1.50 chosen from CHEM*3870, CHEM*4010, CHEM*4400, BIOC*4520, BIOC*4540, BIOC*4580, CHEM*4620, CHEM*4630, CHEM*4720, CHEM*4730, CHEM*4740, CHEM*4880, CHEM*4900, CHEM*4910, MCB*4050, MCB*4080, TOX*4590

Note:
Some of these courses are offered only in alternate years, and some have additional prerequisites for which the student must plan ahead, with the assistance of the faculty advisor.

Computing and Information Science (CIS)
School of Computer Science, College of Engineering and Physical Sciences
A knowledge of Computing is a complement to most areas of study. The Minor in Computing and Information Science is directed towards students who wish to supplement their studies in another area with some experience in Computing. Students interested in pursuing a Major in Computing can do so through the Bachelor of Computing Degree Program.

**Minor (Honours Program)**

CIS*1300 [0.50] Programming  
CIS*1910 [0.50] Discrete Structures in Computing I  
CIS*2170 [0.75] User Interface Design  
CIS*2430 [0.50] Object Oriented Programming  
CIS*2500 [0.50] Intermediate Programming  
CIS*2520 [0.50] Data Structures  
CIS*2750 [0.75] Software Systems Development and Integration  
0.50 additional credits from CIS courses at the 2000 level or above  
0.50 additional credits from CIS courses at the 3000 level or above

**Ecology (ECOL)**

**Department of Integrative Biology, College of Biological Science**

This minor provides a foundation in the principles and methods of ecology. It introduces the knowledge and skills necessary for work in conservation, environmental science, education, resource management, ecological consulting, or nature interpretation.

**Minor (Honours Program)**

A minimum of 5.00 credits is required to complete the minor, which include:

- BIOL*2060 [0.50] Ecology  
- BIOL*3010 [0.50] Laboratory and Field Work in Ecology  
- BIOL*3060 [0.50] Populations, Communities & Ecosystems  
- BIOL*4110 [1.00] Ecological Methods  
- BIOL*4120 [0.50] Evolutionary Ecology

Of the remaining 2.00 required credits, students will select from the following:

At least one of:

- BIOL*2400 [0.50] Evolution  
- BIOL*3020 [0.50] Population Genetics

At least one of:

- BOT*2100 [0.50] Life Strategies of Plants  
- ZOO*2090 [0.50] Vertebrate Structure and Function

One of:

- GEOG*1220 [0.50] Human Impact on the Environment  
- GEOG*1300 [0.50] Introduction to the Biophysical Environment

**Environmental Biology (ENVB)**

**School of Environmental Sciences, Ontario Agricultural College**

The Honours B.Sc. program in Environmental Biology combines a broad education in the life sciences with a more specialized understanding of the biological consequences of interactions between humans and the environment. This major prepares students for post-graduate work in environmental biology and related life sciences and provides a strong foundation for students wishing to pursue careers in teaching, government service or the private sector.

**Major (Honours Program)**

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. This major requires the completion of 20.00 credits. A minimum of 16.00 of these 20.00 must be science credits.

**Semester 1**

- BIOL*1070 [0.50] Discovering Biodiversity  
- CHEM*1040 [0.50] General Chemistry I  
- ENVS*1100 [0.50] Fundamentals of Environmental Sciences  
- MATH*1080 [0.50] Elements of Calculus I  
- PHYS*1080 [0.50] Physics for Life Sciences

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at: [https://www.uoguelph.ca/bsc/](https://www.uoguelph.ca/bsc/)

**Semester 2**

- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology  
- CHEM*1050 [0.50] General Chemistry II  
- PHYS*1070 [0.50] Physics for Life Sciences II

One of:

- CIS*1200 [0.50] Introduction to Computing  
- CIS*1500 [0.50] Introduction to Programming  
- MATH*1090 [0.50] Elements of Calculus II  
- STAT*2040 [0.50] Statistics I

0.50 Liberal Education elective

**Semester 3**

- BIOL*2580 [0.50] Introduction to Biochemistry  
- STAT*2040 [0.50] Statistics I (if not taken in semester 2)  
- TOX*2000 [0.50] Principles of Toxicology

1.00 electives or restricted electives chosen from lists A, B, C and/or D or Liberal Education elective (or 1.50 if STAT*2040 was taken in semester 2)

**Semester 4**

- BIOL*2060 [0.50] Ecology  
- ENVS*2090 [0.50] Problem Solving in Environmental Biology  
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics

1.00 electives or restricted electives chosen from lists A, B, C and/or D

**Semester 5**

- 2.50 electives or restricted electives chosen from lists A, B, C and/or D

**Semester 6**

- 2.50 electives or restricted electives chosen from lists A, B, C and/or D

**Semester 7**

- ENVS*4001 [0.50] Project in Environmental Sciences  
- 2.00 electives or restricted electives chosen from lists A, B, C and/or D

Students contemplating graduate studies are encouraged to take ENVS*4410 in semester 7 and ENVS*4420 or ENVS*4430 in 8.

**Semester 8**

- ENVS*4000 [0.50] Toxological Risk Assessment  
- ENVS*4002 [0.50] Project in Environmental Sciences  
- 1.00 electives or restricted electives chosen from lists A, B, C and/or D

**Restricted Electives**

1. A minimum of 1.00 credits of Liberal Education electives is required. The list of Liberal Education electives for B.Sc. students can be found at: [https://www.uoguelph.ca/bsc/](https://www.uoguelph.ca/bsc/)

2. Select a minimum of 6.00 credits from the following lists of restricted electives during Semesters 3-8. 2.00 credits must be completed from List A. 1.00 credit must be completed from List B. A minimum 3.00 credits must be completed from List C.

3. Students should note that some restricted electives are prerequisites for other restricted electives. Students should consult the most recent undergraduate calendar for specific requirements.

**List A - Environmental Processes**

Minimum of 2.00 credits from the following list:

- BIOL*2400 [0.50] Evolution  
- ENVS*2040 [0.50] Plant Health and the Environment  
- ENVS*2060 [0.50] Soil Science  
- ENVS*2330 [0.50] Current Issues in Ecosystem Science and Biodiversity  
- ENVS*3010 [0.50] Climate Change Biology  
- ENVS*3020 [0.50] Pesticides and the Environment  
- ENVS*3040 [0.50] Natural Chemicals in the Environment  
- ENVS*3150 [0.50] Aquatic Systems  
- ENVS*3220 [0.50] Terrestrial Chemistry  
- ENVS*3340 [0.50] Use and Management of Environmental Data  
- ENVS*3370 [0.50] Terrestrial Ecosystem Ecology

**List B - Organismal Biology**

Minimum of 1.00 credits from the following list:

- BOT*2100 [0.50] Life Strategies of Plants  
- BOT*3050 [0.50] Plant Functional Ecology  
- ENVS*2080 [0.50] Introduction to Environmental Microbiology  
- ENVS*3090 [0.50] Insect Diversity and Biology  
- ENVS*4230 [0.50] Biology of Aquatic Insects  
- MICR*3090 [0.50] Mycology  
- ZOO*4070 [0.50] Animal Behaviour

**List C -**

Students in the Environmental Biology Major are required to take a minimum 3.00 restricted elective credits from any of the following lists:

- Forestry  
  - ENVS*3230 [0.50] Agroforestry Systems  
  - ENVS*3250 [0.50] Forest Health and Disease  
  - ENVS*3270 [0.50] Forest Biodiversity  
  - ENVS*4350 [0.50] Forest Ecology

- Soil/Aquatic Systems  
  - ENVS*3060 [0.50] Groundwater  
  - ENVS*3080 [0.50] Soil and Water Conservation  
  - ENVS*3310 [0.50] Soil Biodiversity and Ecosystem Function  
  - ENVS*4090 [0.50] Soil Management  
  - ENVS*4160 [0.50] Soil and Nutrient Management  
  - ENVS*4320 [1.00] Laboratory and Field Methods in Soil Biodiversity  
  - ENVS*4390 [1.00] Soil Variability and Land Evaluation

- Environmental Toxicology/Pollutants  
  - BIOL*4350 [0.50] Limnology of Natural and Polluted Waters  
  - ENVS*3290 [0.50] Waterborne Disease Ecology  
  - ENVS*4180 [0.50] Insecticide Biological Activity and Resistance  
  - ENVS*4190 [0.50] Biological Activity of Herbicides  
  - ENVS*4370 [0.50] Environmental Organic Chemistry

2019-2020 Undergraduate Calendar  
Last Revision: July 4, 2019
**List D - Independent Research and Study Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4610</td>
<td>Arctic Ecology</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3030</td>
<td>Conservation Field Course</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4260</td>
<td>Field Entomology</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4410</td>
<td>Introduction to Advanced Independent Research</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4420</td>
<td>Advanced Independent Research</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4430</td>
<td>Advanced Independent Research</td>
<td>1.00</td>
</tr>
<tr>
<td>ENVS*4510</td>
<td>Topics in Environmental Sciences</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Credit Summary (20.00 Total Credits)**

4.00 - B.Sc. core credits

5.00 - Required credits for the Major (4.50 if STAT*2040 is taken in Semester 2)

6.00 - Restricted elective credits for the Major (some restricted electives do not count as science electives towards degree therefore additional science electives may be required)

1.00 - Approved Science electives (1.50 if STAT 2040 is taken in semester 2)

1.00 - Liberal Education electives (#1 in restricted elective list)

3.00 - Free electives - any approved elective for B.Sc. students.

Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Environmental Geomatics (EG)**

Department of Geography, Environment and Geomatics, College of Social and Applied Human Sciences

This program provides opportunities for study of the processes and properties of the biophysical environment and a core foundation in the analytical techniques (i.e. Geographical Information Science and Remote Sensing) used for their interpretation, analysis and presentation.

Graduates of the program will have unique specialty in the application of spatial technologies to the study and assessment of biophysical and Earth surface processes.

**Major (Honours Program)**

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult with a B.Sc. Faculty Advisor in the Department of Geography, Environment and Geomatics. All students are encouraged to consult with the advisor on a regular basis.

The major will require the completion of 20.00 credits as indicated below:

**Semester 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1070</td>
<td>Discovering Biodiversity</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>General Chemistry I</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*1350</td>
<td>Earth: Hazards and Global Change</td>
<td>0.50</td>
</tr>
<tr>
<td>PHYS*1080</td>
<td>Physics for Life Sciences</td>
<td>0.50</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>Elements of Calculus I</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Students who are lacking one 4U / grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at: [https://www.uoguelph.ca/bse/revised_SS](https://www.uoguelph.ca/bse/revised_SS)

**Semester 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1090</td>
<td>Introduction to Molecular and Cellular Biology</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>General Chemistry II</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*1300</td>
<td>Introduction to the Biophysical Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>PHYS*1070</td>
<td>Physics for Life Sciences II</td>
<td>0.50</td>
</tr>
</tbody>
</table>

0.50 Liberal Education electives* (GEOG*1220 is recommended)

**Semester 3**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*2240</td>
<td>Fundamentals of Environmental Geology</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2000</td>
<td>Geomorphology</td>
<td>0.50</td>
</tr>
</tbody>
</table>

GEOG*2420 [0.50] The Earth From Space
GEOG*2480 [0.50] Mapping and GIS
0.50 Liberal Education electives*

**Semester 4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*2110</td>
<td>Climate and the Biophysical Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2210</td>
<td>Environment and Resources</td>
<td>0.50</td>
</tr>
<tr>
<td>STAT*2040</td>
<td>Statistics I</td>
<td>0.50</td>
</tr>
</tbody>
</table>

One of:

- CIS*1200 [0.50] Introduction to Computing
- CIS*1500 [0.50] Introduction to Programming
- MATH*1210 [0.50] Calculus II
- MATH*1090 [0.50] Elements of Calculus II

0.50 approved Science electives*

**Semester 5**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*3000</td>
<td>Fluvial Processes</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*3110</td>
<td>Biotic and Natural Resources</td>
<td>0.50</td>
</tr>
</tbody>
</table>

One of:

- GEOG*3020 [0.50] Global Environmental Change
- GEOG*3090 [0.50] Gender and Environment
- GEOG*3210 [0.50] Management of the Biophysical Environment

1.00 electives, at least 0.50 from approved Science electives*

**Semester 6**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*3420</td>
<td>Remote Sensing of the Environment</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*3480</td>
<td>GIS and Spatial Analysis</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*3610</td>
<td>Environmental Hydrology</td>
<td>0.50</td>
</tr>
</tbody>
</table>

1.00 electives, at least 0.50 from approved Science electives*

**Semester 7**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*4110</td>
<td>Environmental Systems Analysis</td>
<td>1.00</td>
</tr>
</tbody>
</table>

1.50 electives, at least 0.50 from approved Science electives* (GEOG*4690 is recommended)

**Semester 8**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*4150</td>
<td>Catchment Processes</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*4480</td>
<td>Applied Geomatics</td>
<td>1.00</td>
</tr>
</tbody>
</table>

1.00 Approved Science electives*

**Credit Summary (20.00 Total Credits)**

4.50 - First year science credits

8.50 - Required science courses semesters 3 – 8

1.00 - Required social science courses semesters 3 – 8

3.00 - Approved Science electives

1.00 - Liberal Education electives

2.00 - Free electives - any approved elective for B.Sc. students.

Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Environmental Geomatics (Co-op) (EG:C)**

Department of Geography, Environment and Geomatics, College of Social and Applied Human Sciences

This program provides opportunities for study of the processes and properties of the biophysical environment and a core foundation in the analytical techniques (i.e. Geographical Information Science and Remote Sensing) used for their interpretation, analysis and presentation.

**Program Requirements**

The Co-op program in Environmental Geomatics is a five year program, including four work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: [https://www.recruitguelph.ca/cecs/](https://www.recruitguelph.ca/cecs/)). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Environmental Geomatics Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3 COOP*1100</td>
<td>Academic Semester 4 COOP*1000 Work Term I</td>
<td>Academic Semester 6</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5 COOP*2000 Work Term II</td>
<td>Academic Semester 7</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>COOP<em>3000 Work Term III COOP</em>4000 Work Term IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7 Academic Semester 8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (21.50 Total Credits)*
4.50 - First year science credits
9.00 - Required science courses semesters 3 – 8
1.00 - Required social science courses semesters 3 – 8
2.50 - Approved Science electives
1.00 - Liberal Education electives
2.00 - Free electives - any approved elective for B.Sc. students.
1.50 - Co-op Work Terms

Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be completed at the 3000 or 4000 level.

Note: A minimum of three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fourth Co-op work term is optional and if completed, the total number of credits will equal 22.00.

The recommended program sequence is outlined below.

Major (Honours Program)

Semester 1 - Fall
BIOI*1070 [0.50] Discovering Biodiversity
CHEM*1040 [0.50] General Chemistry I
GEOG*1350 [0.50] Earth: Hazards and Global Change
PHYS*1080 [0.50] Physics I
One of:
MATH*1080 [0.50] Elements of Calculus I
MATH*1200 [0.50] Calculus I

Students who are lacking one 4U /grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at: https://www.uoguelph.ca/bsc/revised_SS

Semester 2 - Winter
BIOI*1090 [0.50] Introduction to Molecular and Cellular Biology
CHEM*1050 [0.50] General Chemistry II
GEOG*1300 [0.50] Introduction to the Biophysical Environment
PHYS*1070 [0.50] Physics I

0.50 Liberal Education electives

Semester 3 - Fall
COOP*1100 [0.00] Introduction to Co-operative Education
ENVS*2240 [0.50] Fundamentals of Environmental Geology
GEOG*2420 [0.50] The Earth From Space
GEOG*2480 [0.50] Mapping and GIS
STAT*2040 [0.50] Statistics I

One of:
CIS*1200 [0.50] Introduction to Computing
CIS*1500 [0.50] Introduction to Programming
MATH*1210 [0.50] Calculus II
MATH*1090 [0.50] Elements of Calculus II

0.50 approved Science electives

Summer Semester
COOP*1000 [0.50] Co-op Work Term I

Semester 5 - Fall
GEOG*3000 [0.50] Fluvial Processes
GEOG*3110 [0.50] Biotic and Natural Resources
GEOG*3480 [0.50] GIS and Spatial Analysis

0.50 approved Science electives

0.50 Liberal Education electives

Winter Semester
COOP*2000 [0.50] Co-op Work Term II

Semester 6 - Summer
GEOG*3610 [0.50] Environmental Hydrology
GEOG*4990 [0.50] Independent Study in Geography

One of:
GEOG*3020 [0.50] Global Environmental Change
GEOG*3210 [0.50] Management of the Biophysical Environment

1.00 electives

Fall Semester
COOP*3000 [0.50] Co-op Work Term III

Winter Semester
COOP*4000 [0.50] Co-op Work Term IV

Semester 7 - Fall
GEOG*4110 [1.00] Environmental Systems Analysis
1.50 electives, at least 1.00 from approved Science electives

Semester 8 - Winter
GEOG*4150 [0.50] Catchment Processes
GEOG*4480 [1.00] Applied Geomatics

1.00 electives, at least 0.50 from approved Science electives

Food Science (FOOD)

Department of Food Science, Ontario Agricultural College

Major (Honours Program)

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor.

Semester 1 - Fall
BIOI*1090 [0.50] Introduction to Molecular and Cellular Biology
CHEM*1050 [0.50] General Chemistry I
MATH*1090 [0.50] Elements of Calculus I
PHYS*1080 [0.50] Physics I

0.50 Liberal Education electives

Note: CIS*1200, rather than an Liberal Education credit is recommended for those needing to improve their computer skills.

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at: https://www.uoguelph.ca/bsc/revised_SS

Semester 2 - Winter
BIOI*1080 [0.50] Biological Concepts of Health
CHEM*2880 [0.50] Physical Chemistry
FOOD*2150 [0.50] Introduction to Nutritional and Food Science
MICR*2420 [0.50] Introduction to Microbiology

0.50 electives

Semester 3 - Fall
BIOC*2580 [0.50] Introduction to Biochemistry
CHEM*2000 [0.50] General Chemistry II
MATH*1090 [0.50] Elements of Calculus II
PHYS*1070 [0.50] Physics I

0.50 Liberal Education electives

Semester 4 - Winter
FOOD*2100 [0.50] Communication in Food Science
FOOD*2620 [0.50] Food Engineering Principles
NUTR*3210 [0.50] Fundamentals of Nutrition
STAT*2040 [0.50] Statistics I

0.50 electives

Semester 5 - Fall
FOOD*3030 [0.50] Food Chemistry I
FOOD*3160 [0.75] Food Processing I
FOOD*3320 [0.75] Food Microbiology

0.50 electives

Semester 6 - Winter
FOOD*3040 [0.50] Food Chemistry II
FOOD*3170 [0.50] Food Processing II
FOOD*3260 [0.50] Industrial Microbiology
FOOD*3700 [0.50] Sensory Evaluation of Foods

0.50 electives

Semester 7 - Fall
FOOD*4190 [0.50] Advanced Food Analysis
FOOD*4260 [0.50] Food Product Development I

1.50 electives

Semester 8 - Winter
FOOD*4270 [0.50] Food Product Development II

2.00 electives

Notes:
1. ENGL*1200 is recommended for those students needing to improve their English grammar.
2. FOOD*2150 could be replaced by FOOD*2100 with permission of department advisor.
3. Of the 6.50 electives credits:
a. A least 2.00 credits must be Liberal Education electives.
b. At least 2.00 must be from list of Restricted electives.
c. At least 1.00 must be from additional Science electives (1.50 if MCS*3010 is chosen as a Restricted Elective)

**Restricted Electives:**
- FOOD*4070 [0.50] Food Packaging
- FOOD*4090 [0.50] Functional Foods and Nutraceuticals
- FOOD*4110 [0.50] Meat and Poultry Processing
- FOOD*4220 [0.50] Topics in Food Science
- FOOD*4230 [0.50] Research in Food Science
- FOOD*4310 [0.50] Food Safety Management Systems
- FOOD*4400 [0.50] Dairy Processing
- FOOD*4520 [0.50] Utilization of Cereal Grains for Human Food
- MCS*3010 [0.50] Quality Management
- POPM*4040 [0.50] Epidemiology of Food-borne Diseases

**Credit Summary (20.00 Total Credits)**
- 4.00 - 1st year science required
- 9.50 - Required in semesters 3-8
- 2.00 - Restricted electives
- 2.00 - Liberal Education electives
- 1.00 or 1.50 - Additional Science electives (See Note 3 above)
- 1.00 or 1.50 - Free electives (See Note 3 above)

Students not in the Food Science Major who are seeking further study in Food Science are encouraged to consider the Certificate in Food Science. See Special Study Opportunities, Chapter XI of the Calendar.

**Food Science (Co-op) (FOOD:C)**

**Department of Food Science, Ontario Agricultural College**

**Program Requirements**

The Co-op program in Food Science is a five year program, including four work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Food Science Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>Academic Semester 4</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5</td>
<td>Academic Semester 6</td>
<td>COOP*2000 Work Term II</td>
</tr>
<tr>
<td>4</td>
<td>COOP*3000 Work Term III</td>
<td>COOP*4000 Work Term IV</td>
<td>Off</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

**Credit Summary (21.50 Total Credits)**
- 4.00 - First year science required
- 9.50 - Required in semesters 3-8
- 2.00 - Restricted electives
- 2.00 - Liberal Education electives
- 1.00 or 1.50 - Additional Science electives (1.50 if MCS*3010 is chosen as a Restricted Elective)
- 1.00 or 1.50 - Free electives (1.00 if MCS*3010 is chosen as a Restricted Elective)
- 1.50 - Co-op Work Terms

**Notes:**
- A minimum of three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *A fourth Co-op work term is optional and if completed, the total number of credits will equal 22.00.
- Students not in the Food Science Major who are seeking further study in Food Science are encouraged to consider the Certificate in Food Science. See Special Study Opportunities, Chapter XI of the Calendar.

The recommended program sequence is outlined below.

**Major (Honours Program)**

**Semester 1 - Fall**
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1040 [0.50] General Chemistry I
- MATH*1080 [0.50] Elements of Calculus I
- PHYS*1080 [0.50] Physics for Life Sciences

0.50 Liberal Education electives

Note: CIS*1200, rather than an Liberal Education credit is recommended for those needing to improve their computer skills.

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at: [https://www.uoguelph.ca/bsc/revised_SS](https://www.uoguelph.ca/bsc/revised_SS)

**Semester 2 - Winter**
- BIOL*1080 [0.50] Biological Concepts of Health
- CHEM*1050 [0.50] General Chemistry II
- MATH*1090 [0.50] Elements of Calculus II
- PHYS*1070 [0.50] Physics for Life Sciences II

0.50 Liberal Education electives

**Summer Semester**
- Off

**Semester 3 - Fall**
- BIOC*2580 [0.50] Introduction to Biochemistry
- CHEM*2880 [0.50] Physical Chemistry
- COOP*1100 [0.00] Introduction to Co-operative Education
- FOOD*2150 [0.50] Introduction to Nutritional and Food Science
- MICR*2420 [0.50] Introduction to Microbiology

0.50 electives

**Semester 4 - Winter**
- FOOD*2100 [0.50] Communication in Food Science
- FOOD*2620 [0.50] Food Engineering Principles
- NUTR*3210 [0.50] Fundamentals of Nutrition
- STAT*2040 [0.50] Statistics I

0.50 electives

**Summer Semester**
- COOP*1000 [0.50] Co-op Work Term I

**Semester 5 - Fall**
- FOOD*3030 [0.50] Food Chemistry I
- FOOD*3160 [0.75] Food Processing I
- FOOD*3230 [0.75] Food Microbiology

0.50 electives

**Semester 6 - Winter**
- FOOD*3040 [0.50] Food Chemistry II
- FOOD*3170 [0.50] Food Processing II
- FOOD*3260 [0.50] Industrial Microbiology
- FOOD*3700 [0.50] Sensory Evaluation of Foods

0.50 electives

**Summer Semester**
- Optional

**Fall Semester**
- COOP*2000 [0.50] Co-op Work Term II

**Winter Semester**
- COOP*3000 [0.50] Co-op Work Term III

**Semester 7 - Fall**
- FOOD*4190 [0.50] Advanced Food Analysis
- FOOD*4260 [0.50] Food Product Development I

1.50 electives

**Semester 8 - Winter**
- FOOD*4270 [0.50] Food Product Development II

2.00 electives

**Notes:**
1. ENGL*1200 is recommended for those students needing to improve their English grammar.
2. FOOD*2150 could be replaced by FOOD*2010 with permission of department advisor.

**Restricted Electives**
- FOOD*4070 [0.50] Food Packaging
- FOOD*4090 [0.50] Functional Foods and Nutraceuticals
- FOOD*4110 [0.50] Meat and Poultry Processing
- FOOD*4220 [0.50] Topics in Food Science
- FOOD*4230 [0.50] Research in Food Science
- FOOD*4310 [0.50] Food Safety Management Systems
- FOOD*4400 [0.50] Dairy Processing
- FOOD*4520 [0.50] Utilization of Cereal Grains for Human Food

**Last Revision: July 4, 2019**

2019-2020 Undergraduate Calendar
Human Kinetics (HK)

Department of Human Health and Nutritional Sciences, College of Biological Science

Human Kinetics is concerned with understanding capacities for, and limits of, human movement at different ages and with the role of physical activity in human health. Through the use of electives, students may structure a program emphasizing biomechanics and ergonomics, human population biology or nutrition, exercise and metabolism.

If lacking the fundamentals of word processing, spreadsheet use and data management, the student should select CIS*1200 as early in the program as possible.

Major (Honours Program)

B.Sc. students who were not admitted directly into the Human Kinetics major from high school and subsequently wish to transfer to the specialization must apply directly to the Department of Human Health and Nutritional Science by the last day of classes in the winter semester.

To be eligible after first year, applicants must have successfully completed 4.0 science credits in a B.Sc. specialization with an average of 70% or better in BIOL*1070, BIOL*1080 and BIOL*1090. For students with a 65-69.9% average in these three courses, admission to the major will be competitive based on available spaces.

Students wishing to transfer after second year or third year must have a minimum of 70% in their last two semesters (total of 4.00 science credits). For students with a 65-69.9%, admission to the major will be competitive based on available spaces.

All decisions regarding transfers will be made by the end of June.

To complete the major, a minimum of 20.00 credits are required.

Semester 1

BIOL*1080 [0.50] Biological Concepts of Health
CHEM*1040 [0.50] General Chemistry I
MATH*1080 [0.50] Elements of Calculus I
PHYS*1080 [0.50] Physics for Life Sciences

0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at https://www.uoguelph.ca/bsc/revised_SS

Semester 2

BIOL*1070 [0.50] Discovering Biodiversity
BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
CHEM*1050 [0.50] General Chemistry II
PHYS*1070 [0.50] Physics for Life Sciences

0.50 Liberal Education electives

Semester 3

BIOC*2580 [0.50] Introduction to Biochemistry
HK*2270 [0.50] Principles of Human Biomechanics
MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
STAT*2040 [0.50] Statistics I

0.50 Liberal Education electives

Semester 4

HK*2810 [0.50] Human Physiology I - Concepts and Principles
MCB*2050 [0.50] Molecular Biology of the Cell
NUTR*3210 [0.50] Fundamentals of Nutrition

0.50 electives

0.50 Liberal Education electives

Semester 5

HK*3600 [0.75] Applied Human Kinetics I
HK*3810 [0.75] Human Physiology II - Integrated Systems
NUTR*3360 [0.50] Lifestyle Genomics

One of

HK*3401 [0.75] Human Anatomy: Dissection
HK*3501 [0.75] Human Anatomy: Prosection

Semester 6

BIOC*3560 [0.50] Structure and Function in Biochemistry
HK*3100 [0.50] Neuromuscular Physiology
HK*4600 [0.75] Applied Human Kinetics II

One of

HK*3402 [0.75] Human Anatomy: Dissection (if registered in HK*3401 in semester 5)
HK*3502 [0.75] Human Anatomy (if registered in HK*3501 in semester 5)

Semester 7

HK*4550 [0.50] Human Cardio-respiratory Physiology
NUTR*4210 [0.50] Nutrition, Exercise and Energy Metabolism

1.50 electives or restricted electives

Semester 8

2.25 electives or restricted electives

Restricted Electives

1. A minimum of 2.00 credits of Liberal Education electives is required. The list of Liberal Education electives for B.Sc. students can be found at: https://www.uoguelph.ca/bsc/

2. A minimum of 1.00 credits of restricted electives are required which must be selected from HK*4XXX, NUTR*4XXX (must be an approved B.Sc. Science Elective).

Credit Summary (20.00 Total Credits)

4.00 - First year science core
9.75 - Required science courses semesters 3 - 8
1.00 - Restricted elective (# 2 in restricted elective list)
1.25 - Approved Science electives
2.00 - Liberal Education electives (#1 in restricted elective list)
2.00 - Free electives - any approved electives for B.Sc. students.

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

Marine and Freshwater Biology (MFB)

Department of Integrative Biology, College of Biological Science

The Marine and Freshwater Biology major capitalizes on Guelph’s recognized excellence in aquatic research and provides a broad perspective on aquatic environments based on the physical as well as the biological sciences. In this major, students will build upon core courses in ecology, evolution, genetics, and physiology of aquatic biota as they study freshwater and marine environments and work with aquatic organisms experimentally in the field and in the lab. They will have the opportunity to perform independent research projects under a variety of field and laboratory conditions to enhance their learning experience. The major prepares students for post-graduate work in the aquatic sciences, and provides a sound scientific background for students wishing to pursue careers in academia, government service, private sector (e.g., NGOs, fisheries, aquaculture, biotechnology, consulting), conservation, education and research.

Major (Honours Program)

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. A minimum total of 20.00 credits is required to complete the major.

Semester 1

BIOL*1070 [0.50] Discovering Biodiversity
CHEM*1040 [0.50] General Chemistry I
MATH*1080 [0.50] Elements of Calculus I
PHYS*1080 [0.50] Physics for Life Sciences

0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at https://www.uoguelph.ca/bsc/revised_SS

Semester 2

BIOL*1070 [0.50] Discovering Biodiversity
CHEM*1040 [0.50] General Chemistry I
MATH*1080 [0.50] Elements of Calculus I
PHYS*1080 [0.50] Physics for Life Sciences

0.50 Liberal Education electives

Semester 3

BIOL*1070 [0.50] Biological Concepts of Health
BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
CHEM*1050 [0.50] General Chemistry II
PHYS*1070 [0.50] Physics for Life Sciences

0.50 Liberal Education electives

Semester 4

HK*2810 [0.50] Human Physiology I - Concepts and Principles
MCB*2050 [0.50] Molecular Biology of the Cell
NUTR*3210 [0.50] Fundamentals of Nutrition

0.50 electives

0.50 Liberal Education electives

Semester 5

HK*3600 [0.75] Applied Human Kinetics I
HK*3810 [0.75] Human Physiology II - Integrated Systems
NUTR*3360 [0.50] Lifestyle Genomics

One of

HK*3401 [0.75] Human Anatomy: Dissection
HK*3501 [0.75] Human Anatomy: Prosection
### Educational Program Policy

The Co-operative Education program in Marine and Freshwater Biology is a five-year program, including a minimum of four Co-op work terms with a Summer, Fall, and Winter work term. Students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information, students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education website.

### Credit Summary (22.00 Total Credits)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>COOP*5000 Work Term V</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements.

### Major (Honours Program)

#### Semester 1 - Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1070</td>
<td>[0.50] Discovering Biodiversity</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>[0.50] General Chemistry I</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>[0.50] Elements of Calculus I</td>
</tr>
<tr>
<td>PHYS*1080</td>
<td>[0.50] Physics for Life Sciences</td>
</tr>
</tbody>
</table>

#### Semester 2 - Winter

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1090</td>
<td>[0.50] Introduction to Molecular and Cellular Biology</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>[0.50] General Chemistry II</td>
</tr>
<tr>
<td>PHYS*1070</td>
<td>[0.50] Physics for Life Sciences II</td>
</tr>
</tbody>
</table>

#### Semester 3 - Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2060</td>
<td>[0.50] Ecology</td>
</tr>
<tr>
<td>BIOL*2040</td>
<td>[0.50] Evolution</td>
</tr>
<tr>
<td>COOP*1100</td>
<td>[0.00] Introduction to Co-operative Education</td>
</tr>
<tr>
<td>ZOO*2090</td>
<td>[0.50] Vertebrate Structure and Function</td>
</tr>
</tbody>
</table>

#### Semester 4 - Winter

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3450</td>
<td>[0.50] Introduction to Aquatic Environments</td>
</tr>
<tr>
<td>MBG*2040</td>
<td>[0.50] Foundations in Molecular Biology and Genetics</td>
</tr>
<tr>
<td>STAT*2230</td>
<td>[0.50] Biostatistics for Integrative Biology</td>
</tr>
<tr>
<td>ZOO*3600</td>
<td>[0.50] Comparative Animal Physiology I</td>
</tr>
<tr>
<td>ZOO*3610</td>
<td>[0.25] Lab Studies in Animal Physiology I</td>
</tr>
<tr>
<td>ZOO*3700</td>
<td>[0.50] Integrative Biology of Invertebrates</td>
</tr>
</tbody>
</table>

#### Summer Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*1000</td>
<td>[0.50] Co-op Work Term I</td>
</tr>
</tbody>
</table>

#### Semester 5 - Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3450</td>
<td>[0.50] Limnology of Natural and Polluted Waters</td>
</tr>
<tr>
<td>IIBIO*4600</td>
<td>[1.00] Integrative Marine and Freshwater Research</td>
</tr>
</tbody>
</table>

#### Semester 6 - Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4010</td>
<td>[0.50] Adapational Physiology</td>
</tr>
<tr>
<td>ZOO*4330</td>
<td>[0.50] Biology of Fishes</td>
</tr>
<tr>
<td>ZOO*4570</td>
<td>[0.50] Marine Ecological Processes</td>
</tr>
</tbody>
</table>

#### Semester 7 - Winter

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4060</td>
<td>[0.50] Populations, Communities &amp; Ecosystems</td>
</tr>
<tr>
<td>ZOO*4570</td>
<td>[0.50] Developmental Biology</td>
</tr>
</tbody>
</table>

### Program Requirements

The Co-op program in Marine and Freshwater Biology is a five-year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

### Marine and Freshwater Biology (Co-op) (MFB:C)

**Department of Integrative Biology, College of Biological Science**

The Marine and Freshwater Biology major capitalizes on Guelph’s recognized excellence in aquatic research and provides a broad perspective on aquatic environments based on the physical as well as biological sciences. In this major, you will build upon core courses in ecology, evolution, genetics, and physiology of aquatic biota as you study freshwater and marine environments and work with aquatic organisms experimentally in the field and in the lab. You will have the opportunity to perform independent research projects under a variety of field and laboratory conditions to enhance your learning experience. Work placements enable you to gain knowledge, skills and values appropriate for work with individuals and groups in a variety of settings. The major prepares students for post-graduate work in the aquatic sciences, and provides a sound scientific background for students wishing to pursue careers in academia, government service, private sector (e.g., NGOs, fisheries, aquaculture, biotechnology, consulting), conservation, education and research.

### Program Requirements

The Co-op program in Marine and Freshwater Biology is a five-year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

### Marine and Freshwater Biology Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3 COOP*1100</td>
<td>Academic Semester 4</td>
<td>COOP*1000 Work Term I</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5 COOP*2000 Work Term II</td>
<td>COOP*3000 Work Term III</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7</td>
<td>COOP*4000 Work Term IV</td>
</tr>
<tr>
<td>5</td>
<td>COOP*2000 work Term II</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements.

For additional program information, students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education website.
A minimum of 1.00 credits of Liberal Education electives is required. The list of Liberal Education electives for B.Sc. students can be found at: [https://www.uoguelph.ca/bsc/](https://www.uoguelph.ca/bsc/)

**Mathematical Science (MSCI)**

Knowledge of Mathematics and Statistics is crucial for understanding our world. This unique program provides a core of both mathematics and statistics with a choice of a Mathematics stream or a Statistics stream. This major also requires the completion of an area of emphasis as listed. Students are encouraged to speak with a Program Counsellor when choosing courses for the selected stream and area of emphasis.

Students majoring in Mathematical Science cannot minor in Mathematics or Statistics.

### Semester 1
- CHEM*1040 [0.50] General Chemistry I
- MATH*1160 [0.50] Linear Algebra I

One of **
- BIOL*1070 [0.50] Discovering Biodiversity
- BIOL*1080 [0.50] Biological Concepts of Health
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology

1.00 credits from: IPS*1500, or (MATH*1080, PHYS*1080) or (MATH*1200, PHYS*1080)

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at: [https://www.uoguelph.ca/bsc/revised_SS](https://www.uoguelph.ca/bsc/revised_SS)

### Semester 2
- CHEM*1050 [0.50] General Chemistry II
- STAT*2040 [0.50] Statistics I

One of **
- BIOL*1070 [0.50] Discovering Biodiversity
- BIOL*1080 [0.50] Biological Concepts of Health
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology

1.00 credits from: IPS*1510, or (PHYS*1010 and 0.50 credits from : MATH*1090, MATH*1210)**

### Semester 3
- MATH*2200 [0.50] Advanced Calculus I
- STAT*3100 [0.50] Introductory Mathematical Statistics I

One of:
- CIS*1300 [0.50] Programming
- CIS*1500 [0.50] Introduction to Programming

1.00 electives or restricted electives

### Semester 4
- MATH*2130 [0.50] Numerical Methods
- STAT*2050 [0.50] Statistics II

1.00 electives or restricted electives

### Semester 5
- MATH*2440 [0.50] Case Studies in Mathematics and Statistics

2.00 electives or restricted electives

* Students entering the major in first year are strongly advised to take IPS*1500 or (MATH*1200, PHYS*1080). Students declaring the Energy and Mass Transfer, the Electricity and Systems, or the Signal Processing Area of Emphasis should take (MATH*1200, PHYS*1080).

** Students entering the major in first year are strongly advised to take IPS*1510 or (MATH*1210, PHYS*1010). Students declaring the Energy and Mass Transfer, the Electricity and Systems, or the Signal Processing Area of Emphasis should take (MATH*1210, PHYS*1010).

*** BIOL*1070 and BIOL*1090 are recommended if taking either the BINF or the BBM Area of Emphasis

### RESTRICTED ELECTIVES

1. A minimum of 1.00 credits of Liberal Education electives is required. The list of Liberal Education electives for B.Sc. students can be found at: [https://www.uoguelph.ca/bsc/](https://www.uoguelph.ca/bsc/)

2. 5.50 credits from either the Mathematics Stream or the Statistics Stream as follows:

#### Mathematics Stream:
- MATH*2000 [0.50] Proofs, Sets, and Numbers
- MATH*2210 [0.50] Advanced Calculus II
- MATH*2270 [0.50] Applied Differential Equations
- MATH*3160 [0.50] Linear Algebra II
- MATH*3200 [0.50] Real Analysis

3. 0.50 additional credits in MATH or STAT at 2000 level or above

#### Statistics Stream:
- STAT*3110 [0.50] Introductory Mathematical Statistics II
- STAT*3240 [0.50] Applied Regression Analysis

4. 0.50 additional credits in MATH or STAT at 2000 level or above

#### AREAS OF EMPHASIS

Students are required to complete one of the following Areas of Emphasis. Each Area of Emphasis is 2.50 credits from a single field of study.

### BIOINFORMATICS (BINF)

The following credits must be taken:
- BIOL*2400 [0.50] Evolution
- BIOL*3020 [0.50] Population Genetics
- BIOL*3040 [0.50] Methods in Evolutionary Biology
- BIOL*3300 [0.50] Applied Bioinformatics
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics

### BIOMATHEMATICAL OR BIOSTATISTICAL MODELLING (BBM)

The following credits must be taken:
- BIO*2060 [0.50] Ecology
- BIO*2400 [0.50] Evolution
- BIO*3060 [0.50] Populations, Communities & Ecosystems
- BIO*3130 [0.50] Conservation Biology
- BIO*4150 [0.50] Wildlife Conservation and Management

### COMPUTER SCIENCE (CS)

The following credits must be taken:
- CIS*2430 [0.50] Object Oriented Programming
- CIS*2500 [0.50] Intermediate Programming
- CIS*2520 [0.50] Data Structures

at least 1.00 credits from:
- CIS*3110 [0.50] Operating Systems I
- CIS*3190 [0.50] Software for Legacy Systems
- CIS*3490 [0.50] The Analysis and Design of Computer Algorithms
- CIS*3530 [0.50] Data Base Systems and Concepts

Note: CIS*2750 is recommended in addition to the Area of Emphasis requirements for students interested in Computer Science

### ECONOMICS (ECON)

The following credits must be taken:
- ECON*1050 [0.50] Introductory Microeconomics
- ECON*2100 [0.50] Introductory Macroeconomics
- ECON*2310 [0.50] Intermediate Microeconomics

at least 1.00 credits from:
- ECON*3110 [0.50] Game Theory
- ECON*3710 [0.50] Advanced Microeconomics
- ECON*4710 [0.50] Advanced Topics in Microeconomics

Note: ECON*1050 and ECON*1100 are approved Liberal Education electives for B.Sc. students

### ENERGY AND MASS TRANSFER (EMT)

The following credits must be taken:
- ENGG*1210 [0.50] Engineering Mechanics I
**ELECTRICITY AND SYSTEMS (EAS)**

The following credits must be taken:
- ENGG*1210 [0.50] Engineering Mechanics I
- ENGG*2400 [0.50] Engineering Systems Analysis
- ENGG*2450 [0.50] Electric Circuits

at least 1.00 credits from:
- ENGG*3410 [0.50] Systems and Control Theory
- ENGG*3450 [0.50] Electronic Devices
- ENGG*4460 [0.50] Robotic Systems

**Note:** No more than 3.00 credits in ENGG courses may be taken.

**SIGNAL PROCESSING (SP)**

The following credits must be taken:
- ENGG*1210 [0.50] Engineering Mechanics I
- ENGG*2400 [0.50] Engineering Systems Analysis
- ENGG*2450 [0.50] Electric Circuits
- ENGG*3390 [0.50] Signal Processing
- ENGG*4660 [0.50] Medical Image Processing

**Note:** No more than 3.00 credits in ENGG courses may be taken.

**INDIVIDUALIZED (IN)**

It is required that 2.50 credits are taken from approved Science electives for B.Sc. students where 1.00 credits must be at the 3000 level or above. Students declaring an Individualized Area of Emphasis must have their choice of 2.50 credits approved by an academic advisor.

**Credit Summary (20.00 Total Credits)**

5.00 - First year science credits
3.00 - Required science courses semesters 3 – 8
8.00 - Restricted electives (Stream and Area of Emphasis)
1.00 - Liberal Education electives (@ 1 in restricted elective list)
3.00 - Free electives - any approved elective for B.Sc. students. (Could be less if restricted electives do not count as science)

Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Minor (Honours Program)**

This requires 1.00 calculus credits and 4.00 other credits chosen from mathematics, statistics, and computing and information science. For these 4.00 credits students will choose at least 0.50 from each discipline. At least 1.00 credits must be at the 3000 level or above. CIS*2050 and CIS*3000 cannot be counted toward this minor. This minor cannot be combined with a major in Mathematics, Statistics, or Bachelor of Computing program.

**Mathematics (MATH)**

**Department of Mathematics & Statistics, College of Engineering and Physical Sciences**

Knowledge of mathematics is crucial for understanding our world. The Minor in Mathematics is designed to provide considerable flexibility for students to pursue their own mathematical interests, whether they be in the concepts of “pure” mathematics or techniques and applications. Students minoring in Mathematics will develop skills that are valued in many sectors such as business, education, government, and industry.

**Minor (Honours Program)**

A total of 5.00 credits is required to complete the Minor, including:

- MATH*1080 or MATH*1200*
- MATH*1090 or MATH*1210**
- MATH*1160 [0.50] Linear Algebra I
- MATH*2000 [0.50] Proofs, Sets, and Numbers
- MATH*2200 [0.50] Advanced Calculus I
- STAT*2040 [0.50] Statistics I

0.50 additional Mathematics credits at the 2000 level or above.

1.50 additional Mathematics credits at the 3000 or 4000 level.

* IPS*1500 can count toward this 0.50 credit
** IPS*1510 can count toward this 0.50 credit

**Note:** Students majoring in Mathematical Science cannot minor in Mathematics.

**Microbiology (MICR)**

**Department of Molecular and Cellular Biology, College of Biological Science**

Microbiology programs are designed to give students a good understanding of microorganisms, including diversity, ecology, physiology, molecular genetics, current approaches in bacterial genomics/proteomics, and microbial associations with animal hosts and the environments. Such knowledge will provide the basis for further work with microbes in medicine, agricultural industries (including biotechnology, pharmaceuticals, food and beverage) and the environment (surveillance and bioremediation).

Students can take the B.Sc. program with a Major in Microbiology, or combine the minor with another major. Students should plan their programs in consultation with the microbiology faculty advisor. As course offerings may change during the program, students are strongly encouraged to review their plans at least once a year with their advisors, and to check the departmental website for program news.

**Major (Honours Program)**

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor.

**Semester 1**

- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1040 [0.50] General Chemistry I
- MATH*1080 [0.50] Elements of Calculus I
- PHYS*1080 [0.50] Physics for Life Sciences
- 0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at https://www.uoguelph.ca/bsc/revised_SS

**Semester 2**

- BIOL*1070 [0.50] Discovering Biodiversity
- BIOL*1080 [0.50] Biological Concepts of Health
- CHEM*1050 [0.50] General Chemistry II
- PHYS*1070 [0.50] Physics for Life Sciences II
- 0.50 Liberal Education electives

**Semester 3**

- BIOL*2040 [0.50] Introduction to Biochemistry
- MCB*2430 [0.50] Foundations in Molecular Biology and Genetics
- MCB*2440 [0.50] Introduction to Microbiology
- STAT*2040 [0.50] Statistics I
- 0.50 Liberal Education electives

**Semester 4**

- BIOL*3560 [0.50] Structure and Function in Biochemistry
- MCB*2050 [0.50] Molecular Biology of the Cell
- MCB*2430 [0.50] Methods in Microbial Culture and Physiology
- 0.50 electives
- 0.50 Liberal Education electives

**Semester 5**

- MCB*3080 [0.50] Bacterial Genetics
- MCB*3420 [0.50] Microbial Diversity and Ecology
- 1.50 electives or restricted electives

**Semester 6**

- MCB*3350 [0.75] Laboratory Methods in Molecular Biology
- MCB*3260 [0.50] Microbial Adaptation
- MCB*3430 [0.75] Advanced Methods in Microbiology
- A minimum of 0.50 electives or restricted electives

**Semester 7**

- 2.50 electives or restricted electives which can include MCB*4500

**Semester 8**

- 2.50 electives or restricted electives which can include MCB*4510

**Restricted Electives**

- 1. A minimum of 2.00 credits of Liberal Education electives is required. The list of Liberal Education electives for B.Sc. students can be found at: https://www.uoguelph.ca/bsc/

- 2. 3.50 restricted elective credits of which 1.00 credits must be at the 4000 level.
- BIOC*4540 [0.75] Enzymology
- BIOC*4580 [0.50] Membrane Biochemistry
- ENVS*3290 [0.50] Waterborne Disease Ecology
- FOOD*3230 [0.75] Food Microbiology
- FOOD*3240 [0.50] Food Microbiology
- FOOD*3260 [0.50] Industrial Microbiology
- FOOD*3270 [0.50] Industrial Microbiology
- FOOD*4400 [0.50] Dairy Processing
- MCB*3010 [0.50] Dynamics of Cell Function and Signalin
- MCB*4500 [1.00] Research Project in Molecular & Cellular Biology
- MCB*4510 [1.00] Research Project in Molecular & Cellular Biology
- MCB*4600 [0.50] Topics in Molecular and Cellular Biology
- MCB*3090 [0.50] Mycology
- MCB*3220 [0.50] Plant Microbiology

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

**Credit Summary (21.50 Total Credits)**

4.00 - First year science core
6.50 - Required science courses semesters 3 - 8
3.50 - Restricted electives (#2 in restricted electives list)
2.00 - Approved Science electives
2.00 - Liberal Education electives (#1 in restricted electives list)
2.00 - Free electives - any approved electives for B.Sc. students.

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Minor (Honours Program)**

The minor in Microbiology consists of the following 5.00 credits including:

- BIOC*3560 [0.50] Structure and Function in Biochemistry
- MICR*2420 [0.50] Introduction to Microbiology
- MICR*2430 [0.50] Methods in Microbial Culture and Physiology

A minimum of 2.50 credits from:

- FOOD*3230 [0.75] Food Microbiology
- FOOD*3240 [0.50] Food Microbiology
- FOOD*3260 [0.50] Industrial Microbiology
- FOOD*3270 [0.50] Industrial Microbiology
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- MBG*3080 [0.50] Bacterial Genetics
- MBG*3350 [0.75] Laboratory Methods in Molecular Biology
- MICR*3090 [0.50] Mycology
- MICR*3220 [0.50] Plant Microbiology
- MICR*3230 [0.50] Immunology
- MICR*3260 [0.50] Microbial Adaptation
- MICR*3330 [0.50] World of Viruses
- MICR*3420 [0.50] Microbial Diversity and Ecology
- MICR*3430 [0.50] Advanced Methods in Microbiology

1.00 credits from:

- MICR*4010 [0.50] Pathogenic Microbiology
- MICR*4330 [0.50] Molecular Virology
- MICR*4430 [0.50] Medical Virology
- MICR*4520 [0.50] Microbial Cell Biology
- MICR*4530 [0.50] Immunology II

**Microbiology (Co-op) (MICR:C)**

**Department of Molecular and Cellular Biology, College of Biological Science**

Microbiology programs are designed to give students a good understanding of microorganisms, including diversity, ecology, physiology, molecular genetics, current approaches in bacterial genomics/proteomics, and microbial associations with animal hosts and the environments. Such knowledge will provide the basis for further work with microbes in medicine, agricultural industries (including biotechnology, pharmaceuticals, food and beverage) and the environment (surveillance and bioremediation).

**Program Requirements**

The Co-op program in Microbiology is a five year program, including four work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: [https://www.recruitguelph.ca/cecs/](https://www.recruitguelph.ca/cecs/)). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

**Microbiology Academic and Co-op Work Term Schedule**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>Academic Semester 4</td>
<td>COOP*1100 Work Term I</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5</td>
<td>Academic Semester 6</td>
<td>COOP*2000 Work Term II</td>
</tr>
<tr>
<td>4</td>
<td>COOP*3000 Work Term III</td>
<td>COOP*4000 Work Term IV</td>
<td>Off</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 7</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Academic Semester 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST*1000</td>
<td>History of Medicine</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>Calculus I</td>
</tr>
<tr>
<td>BIOL*1080</td>
<td>Introduction to Cells</td>
</tr>
<tr>
<td>PHYS*1090</td>
<td>Physics I</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>BIOL*1090</td>
<td>Introduction to Organisms</td>
</tr>
<tr>
<td>MG*1080</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>MBG*1090</td>
<td>General Microbiology</td>
</tr>
<tr>
<td>MATH*2080</td>
<td>Calculus II</td>
</tr>
<tr>
<td>BIOL*2090</td>
<td>Genetics I</td>
</tr>
<tr>
<td>CHEM*2040</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>BIO*3080</td>
<td>Bacterial Genetics</td>
</tr>
<tr>
<td>BIOC*3090</td>
<td>Laboratory Methods in Molecular</td>
</tr>
<tr>
<td></td>
<td>Biology</td>
</tr>
<tr>
<td>BIOC*4010</td>
<td>Pathogenic Microbiology</td>
</tr>
<tr>
<td></td>
<td>Mycology</td>
</tr>
<tr>
<td></td>
<td>Immunology II</td>
</tr>
<tr>
<td></td>
<td>Microbial Diversity and Ecology</td>
</tr>
<tr>
<td></td>
<td>Advanced Methods in Microbiology</td>
</tr>
</tbody>
</table>

**Academic Semester 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST*1000</td>
<td>History of Medicine</td>
</tr>
<tr>
<td>MATH*1180</td>
<td>Calculus II</td>
</tr>
<tr>
<td>BIOL*1190</td>
<td>Introduction to Organisms</td>
</tr>
<tr>
<td>MG*1190</td>
<td>General Microbiology</td>
</tr>
<tr>
<td>CHEM*2140</td>
<td>Inorganic Chemistry</td>
</tr>
<tr>
<td>BIO*3180</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>BIOC*3190</td>
<td>Laboratory Methods in Molecular</td>
</tr>
<tr>
<td></td>
<td>Biology</td>
</tr>
<tr>
<td>BIOC*4100</td>
<td>Pathogenic Microbiology</td>
</tr>
<tr>
<td></td>
<td>Mycology</td>
</tr>
<tr>
<td></td>
<td>Immunology II</td>
</tr>
<tr>
<td></td>
<td>Microbial Diversity and Ecology</td>
</tr>
<tr>
<td></td>
<td>Advanced Methods in Microbiology</td>
</tr>
</tbody>
</table>

**Academic Semester 3**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST*1000</td>
<td>History of Medicine</td>
</tr>
<tr>
<td>MATH*2180</td>
<td>Calculus III</td>
</tr>
<tr>
<td>BIOL*2190</td>
<td>Introduction to Organisms</td>
</tr>
<tr>
<td>MG*2190</td>
<td>General Microbiology</td>
</tr>
<tr>
<td>CHEM*3140</td>
<td>Physical Chemistry</td>
</tr>
<tr>
<td>BIO*3280</td>
<td>Biological Chemistry</td>
</tr>
<tr>
<td>BIOC*3290</td>
<td>Laboratory Methods in Molecular</td>
</tr>
<tr>
<td></td>
<td>Biology</td>
</tr>
<tr>
<td>BIOC*4200</td>
<td>Pathogenic Microbiology</td>
</tr>
<tr>
<td></td>
<td>Mycology</td>
</tr>
<tr>
<td></td>
<td>Immunology II</td>
</tr>
<tr>
<td></td>
<td>Microbial Diversity and Ecology</td>
</tr>
<tr>
<td></td>
<td>Advanced Methods in Microbiology</td>
</tr>
</tbody>
</table>

**Academic Semester 4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST*1000</td>
<td>History of Medicine</td>
</tr>
<tr>
<td>MATH*3180</td>
<td>Calculus IV</td>
</tr>
<tr>
<td>BIOL*3190</td>
<td>Introduction to Organisms</td>
</tr>
<tr>
<td>MG*3190</td>
<td>General Microbiology</td>
</tr>
<tr>
<td>CHEM*4140</td>
<td>Physical Chemistry</td>
</tr>
<tr>
<td>BIO*4180</td>
<td>Biological Chemistry</td>
</tr>
<tr>
<td>BIOC*4290</td>
<td>Laboratory Methods in Molecular</td>
</tr>
<tr>
<td></td>
<td>Biology</td>
</tr>
<tr>
<td>BIOC*5200</td>
<td>Pathogenic Microbiology</td>
</tr>
<tr>
<td></td>
<td>Mycology</td>
</tr>
<tr>
<td></td>
<td>Immunology II</td>
</tr>
<tr>
<td></td>
<td>Microbial Diversity and Ecology</td>
</tr>
<tr>
<td></td>
<td>Advanced Methods in Microbiology</td>
</tr>
</tbody>
</table>
A minimum of 2.00 credits of Liberal Education electives is required. The list of Liberal Education electives for B.Sc. students can be found at: https://www.uoguelph.ca/bsc/

### Restricted Electives

1. A minimum of 2.00 credits must be at the 4000 level.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4540</td>
<td>Enzymology</td>
</tr>
<tr>
<td>BIOL*4580</td>
<td>Membrane Biochemistry</td>
</tr>
<tr>
<td>ENVS*3290</td>
<td>Waterborne Disease Ecology</td>
</tr>
<tr>
<td>FOOD*3230</td>
<td>Food Microbiology</td>
</tr>
<tr>
<td>FOOD*3240</td>
<td>Food Microbiology</td>
</tr>
<tr>
<td>FOOD*3260</td>
<td>Industrial Microbiology</td>
</tr>
<tr>
<td>FOOD*3270</td>
<td>Industrial Microbiology</td>
</tr>
<tr>
<td>FOOD*4400</td>
<td>Dairy Processing</td>
</tr>
<tr>
<td>MCB*3010</td>
<td>Dynamics of Cell Function and Signaling</td>
</tr>
<tr>
<td>MCB*4500</td>
<td>Research Project in Molecular &amp; Cellular Biology I</td>
</tr>
<tr>
<td>MCB*4510</td>
<td>Research Project in Molecular &amp; Cellular Biology I</td>
</tr>
<tr>
<td>MCB*4600</td>
<td>Topics in Molecular and Cellular Biology</td>
</tr>
<tr>
<td>MCB*4700</td>
<td>Mycology</td>
</tr>
<tr>
<td>MCB*3220</td>
<td>Plant Microbiology</td>
</tr>
<tr>
<td>MCB*3230</td>
<td>Immunology</td>
</tr>
<tr>
<td>MCB*3330</td>
<td>World of Viruses</td>
</tr>
<tr>
<td>MCB*4010</td>
<td>Pathogenic Microbiology</td>
</tr>
<tr>
<td>MCB*4330</td>
<td>Molecular Virology</td>
</tr>
<tr>
<td>MCB*4430</td>
<td>Medical Virology</td>
</tr>
<tr>
<td>MCB*4520</td>
<td>Microbial Cell Biology</td>
</tr>
<tr>
<td>MCB*4530</td>
<td>Immunology II</td>
</tr>
<tr>
<td>PATH*3040</td>
<td>Principles of Parasitology</td>
</tr>
</tbody>
</table>

### Molecular Biology and Genetics (MBG)

The B.Sc. program with a Major in Molecular Biology and Genetics is a broadly based program in genetics including related areas of cell and molecular biology. In consultation with the Faculty Advisor, students can choose a general program or can focus their courses in areas such as molecular biology, cell biology, developmental biology, genetics, or agricultural genetics. The program qualifies students for postgraduate training in cell or molecular biology and genetics including clinical genetics and genetic counselling, and provides an excellent background for careers in biotechnology, toxicology, agriculture and medical research. Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor.

### Major (Honours Program)

A total of 20.00 credits is required to complete the major.

#### Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1090</td>
<td>Introduction to Molecular and Cellular Biology</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>General Chemistry I</td>
<td>0.50</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>Elements of Calculus I</td>
<td>0.50</td>
</tr>
<tr>
<td>PHYS*1080</td>
<td>Physics for Life Sciences</td>
<td>0.50</td>
</tr>
</tbody>
</table>

0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at https://www.uoguelph.ca/bsc/revised_SS

#### Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1070</td>
<td>Discovering Biodiversity</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOL*1080</td>
<td>Biological Concepts of Health</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>General Chemistry II</td>
<td>0.50</td>
</tr>
<tr>
<td>PHYS*1070</td>
<td>Physics for Life Sciences</td>
<td>0.50</td>
</tr>
</tbody>
</table>

0.50 Liberal Education electives

#### Semester 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2580</td>
<td>Introduction to Biochemistry</td>
<td>0.50</td>
</tr>
<tr>
<td>MBG*2040</td>
<td>Foundations in Molecular Biology and Genetics</td>
<td>0.50</td>
</tr>
<tr>
<td>MCB*2420</td>
<td>Introduction to Microbiology</td>
<td>0.50</td>
</tr>
<tr>
<td>STAT*2040</td>
<td>Statistics I</td>
<td>0.50</td>
</tr>
</tbody>
</table>

0.50 Liberal Education electives

#### Semester 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3560</td>
<td>Structure and Function in Biochemistry</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*2700</td>
<td>Organic Chemistry I</td>
<td>0.50</td>
</tr>
<tr>
<td>MCB*2050</td>
<td>Molecular Biology of the Cell</td>
<td>0.50</td>
</tr>
<tr>
<td>MCB*2430</td>
<td>Methods in Microbial Culture and Physiology</td>
<td>0.50</td>
</tr>
</tbody>
</table>

0.50 Liberal Education electives

#### Semester 5

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBG*3040</td>
<td>Molecular Biology of the Gene</td>
<td>0.50</td>
</tr>
<tr>
<td>MBG*3350</td>
<td>Laboratory Methods in Molecular Biology</td>
<td>0.75</td>
</tr>
</tbody>
</table>

#### Semester 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBG*4500</td>
<td>Research Project in Molecular &amp; Cellular Biology I</td>
</tr>
<tr>
<td>MCB*4510</td>
<td>Research Project in Molecular &amp; Cellular Biology I</td>
</tr>
</tbody>
</table>

#### Semester 7

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBG*4500</td>
<td>Research Project in Molecular &amp; Cellular Biology I</td>
</tr>
</tbody>
</table>

#### Semester 8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBG*4500</td>
<td>Research Project in Molecular &amp; Cellular Biology I</td>
</tr>
</tbody>
</table>

### Credit Summary (20.00 Total Credits)

4.00 - First year science core

7.25 - Required science courses semesters 3 - 8

3.00 - Restricted electives (#2 and 3 in restricted electives list)

1.75 - Approved science electives

2.00 - Liberal Education electives (# 1 in restricted elective list)

2.00 - Free electives - any approved elective for B.Sc. Students

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

### Minor (Honours Program)

A minor in Molecular Biology and Genetics requires 5.00 credits in Molecular Biology and Genetics chosen in consultation with the faculty advisor, and will include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBG*2040</td>
<td>Foundations in Molecular Biology and Genetics</td>
<td>0.50</td>
</tr>
<tr>
<td>MCB*2050</td>
<td>Molecular Biology of the Cell</td>
<td>0.50</td>
</tr>
</tbody>
</table>

A minimum of 4.00 credits from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3560</td>
<td>Structure and Function in Biochemistry</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOL*3020</td>
<td>Population Genetics</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOL*3300</td>
<td>Applied Bioinformatics</td>
<td>0.50</td>
</tr>
<tr>
<td>MBG*2040</td>
<td>Fundamentals of Plant and Animal Genetics</td>
<td>0.50</td>
</tr>
<tr>
<td>MBG*3040</td>
<td>Molecular Biology of the Gene</td>
<td>0.50</td>
</tr>
<tr>
<td>MBG*3050</td>
<td>Human Genetics</td>
<td>0.50</td>
</tr>
<tr>
<td>MBG*3060</td>
<td>Quantitative Genetics</td>
<td>0.50</td>
</tr>
<tr>
<td>MBG*3080</td>
<td>Bacterial Genetics</td>
<td>0.50</td>
</tr>
<tr>
<td>MBG*3100</td>
<td>Plant Genetics</td>
<td>0.50</td>
</tr>
<tr>
<td>MBG*3350</td>
<td>Laboratory Methods in Molecular Biology</td>
<td>0.75</td>
</tr>
<tr>
<td>MBG*3660</td>
<td>Genomics</td>
<td>0.50</td>
</tr>
</tbody>
</table>
MBG*4030  [0.50]  Animal Breeding Methods and Applications
MBG*4040  [0.50]  Genetics and Molecular Biology of Development
MBG*4110  [0.50]  Epigenetics
MBG*4160  [0.50]  Plant Breeding
MBG*4240  [0.50]  Applied Molecular Genetics in Medicine and Biotechnology
MBG*4270  [0.50]  DNA Replication, Recombination and Repair
MBG*4300  [0.50]  Plant Molecular Genetics
MCR*3010  [0.50]  Dynamics of Cell Function and Signaling
MCR*4010  [0.50]  Advanced Cell Biology
MCR*4050  [0.50]  Protein and Nucleic Acid Structure
MICR*3330  [0.50]  World of Viruses
MICR*4330  [0.50]  Molecular Virology

**Nanoscience (NANO)**

Administered jointly by the Department of Chemistry and the Department of Physics, College of Engineering and Physical Sciences

**Major (Honours Program)**

The major will require the completion of 20.00 credits as indicated below.

**Semester 1**

Biol*1090  [0.50]  Introduction to Molecular and Cellular Biology
Chem*1040  [0.50]  General Chemistry I
PIS*1500  [1.00]  Integrated Mathematics and Physics I
NANO*1000  [0.50]  Introduction to Nanoscience

Students who are lacking one 4U /grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at: https://www.uoguelph.ca/bsc/revised_SS

**Semester 2**

Chem*1050  [0.50]  General Chemistry II
PIS*1510  [1.00]  Integrated Mathematics and Physics II
Math*1160  [0.50]  Linear Algebra I

One of

- Biol*1070  [0.50]  Discovering Biodiversity
- Biol*1080  [0.50]  Biological Concepts of Health

**Semester 3**

Chem*2060  [0.50]  Structure and Bonding
Math*2270  [0.50]  Applied Differential Equations
NANO*2000  [0.50]  Synthesis and Characterization of Nanomaterials I
Phys*2330  [0.50]  Electricity and Magnetism I

One of

- Chem*2820  [0.50]  Thermodynamics and Kinetics
- Phys*2240  [0.50]  Thermal Physics

**Semester 4**

Chem*2070  [0.50]  Structure and Spectroscopy
NANO*2100  [0.50]  Synthesis and Characterization of Nanomaterials II
Phys*2310  [0.50]  Mechanics

1.00 electives*

**Semester 5**

NANO*3200  [0.50]  Nanolithographic Techniques
NANO*3500  [0.50]  Thin Film Science

One of:

- Chem*3860  [0.50]  Quantum Chemistry
- Phys*3230  [0.50]  Quantum Mechanics I

1.00 electives

**Semester 6**

NANO*3300  [0.50]  Spectroscopy of Nanomaterials
NANO*3660  [0.50]  Computational Methods in Materials Science

1.50 electives

**Semester 7**

NANO*4100  [0.50]  Biological Nanomaterials
NANO*4700  [0.50]  Concepts in Quantum Computing

1.50 electives

**Semester 8**

NANO*4200  [0.50]  Topics in Nanomaterials

2.00 electives

* To take Phys*3230 in semester 5, Phys*2340 must be selected as an elective in semester 4.

**Areas of Focus**

In completing the science requirements for the degree, some suggested complementary areas of focus are:

- Chemistry: Inorganic
  - Semester 4: Chem*2480
  - Semester 5: Chem*3640
  - Semester 6: Chem*3650
  - Semester 7: Chem*4620
  - Semester 8: Chem*2700

- Chemistry: Organic
  - Semester 4: Chem*2700
  - Semester 5: Chem*3750
  - Semester 6: Chem*3760
  - Semester 7: Chem*4730
  - Semester 8: Chem*2480, Chem*4720

- Chemistry: Physical/Analytical
  - Semester 4: Chem*2480
  - Semester 5: Chem*3860
  - Semester 6: Chem*3430 or Chem*3870
  - Semester 7: Chem*3440
  - Semester 8: Chem*3430 or Chem*3870

- Engineering
  - Semester 2: Cis*1500
  - Semester 4: Engg*2450
  - Semester 5: Engg*2410, Engg*3450
  - Semester 6: Engg*4550
  - Semester 7: Engg*4080

- Mathematics and Statistics
  - Semester 4: Stat*2040
  - Semester 5: Stat*3100
  - Semester 6: Math*2130
  - Semester 7: Math*4240
  - Semester 8: Math*3160

- Physics
  - Semester 4: Phys*2340
  - Semester 5: Math*2200, Phys*3130
  - Semester 6: Phys*3000
  - Semester 7: Phys*4180, Phys*4240
  - Semester 8: Phys*4040, Phys*4150

*Note: Courses marked with an asterisk may require additional prerequisites. Students should consult the relevant course descriptions for further information.

**Credit Summary (20.00 Total Credits)**

4.50 - First year science credits
8.00 - Required science courses semesters 3 – 8
0.50 or 1.00- Restricted electives (either NANO 4900 (1.00) or NANO 4910 (0.50))
2.50 to 3.00 - Approved Science electives (depending on restricted elective chosen above)
1.00 - Liberal Education electives
3.00 - Free electives - any approved elective for B.Sc. students. (could be less if restricted electives do not count as science)

Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Nanoscience (NANO:C)**

Administered jointly by the Department of Chemistry and the Department of Physics, College of Engineering and Physical Sciences

**Program Requirements**

The Co-op program in Nanoscience is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Nanoscience Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1100</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>Academic Semester 5</td>
<td>COOP*2000 Work Term II</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7</td>
<td>COOP*4000 Work Term IV</td>
</tr>
</tbody>
</table>

Last Revision: July 4, 2019
<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>COOP*5000 Work Term V</td>
<td>Academic Semester 8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

**Credit Summary (22.00 Total Credits)**

- 4.50 - First year science core
- 8.00 - Required science courses semesters 3 - 8
- 0.50 or 1.00 - Restricted electives (either NANO 4900 (1.00) or NANO 4910 (0.50))
- 2.50 to 3.00 - Approved Science electives (depending on restricted elective chosen above)
- 1.00 - Liberal Education electives
- 3.00 - Free electives - any approved elective for B.Sc. students. (could be less if restricted electives do not count as science)
- 2.00 - Co-op Work Terms

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Note**: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. A fifth Co-op work term is optional and if completed, the total number of credits will equal 22.50

The recommended program sequence is outlined below.

### Major (Honours Program)

#### Semester 1 - Fall
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1040 [0.50] General Chemistry I
- IPS*1500 [1.00] Integrated Mathematics and Physics I
- NANO*1000 [0.50] Introduction to Nanoscience

Students who are lacking one 4U grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at: [https://www.uoguelph.ca/bsc/revised_SS](https://www.uoguelph.ca/bsc/revised_SS)

#### Semester 2 - Winter
- BIOS*1050 [0.50] General Chemistry II
- IPS*1510 [1.00] Integrated Mathematics and Physics II
- MATH*1160 [0.50] Linear Algebra I

One of:
- BIOL*1070 [0.50] Discovering Biodiversity
- BIOL*1080 [0.50] Biological Concepts of Health

#### Semester 3 - Fall
- CHEM*2060 [0.50] Structure and Bonding
- COOP*1100 [0.00] Introduction to Co-operative Education
- MATH*2270 [0.50] Applied Differential Equations
- NANO*2000 [0.50] Synthesis and Characterization of Nanomaterials I
- PHYS*2330 [0.50] Electricity and Magnetism I

One of:
- CHEM*2820 [0.50] Thermodynamics and Kinetics
- PHYS*2240 [0.50] Thermal Physics

#### Semester 4 - Winter
- CHEM*2070 [0.50] Structure and Spectroscopy
- NANO*2100 [0.50] Synthesis and Characterization of Nanomaterials II
- PHYS*2310 [0.50] Mechanics

1.00 electives*

#### Summer Semester
- COOP*1000 [0.50] Co-op Work Term I

#### Semester 5 - Fall
- NANO*3200 [0.50] Nanolithographic Techniques
- NANO*3500 [0.50] Thin Film Science

One of:
- CHEM*3860 [0.50] Quantum Chemistry
- PHYS*3230 [0.50] Quantum Mechanics I

1.00 electives

#### Winter Semester
- COOP*2000 [0.50] Co-op Work Term II

(8-month work term in conjunction with COOP*3000)

#### Summer Semester
- COOP*3000 [0.50] Co-op Work Term III

(8-month work term in conjunction with COOP*2000)

### Semester 6 - Fall
- NANO*4100 [0.50] Biological Nanomaterials
- NANO*4700 [0.50] Concepts in Quantum Computing
- 1.50 electives

### Semester 7 - Winter
- NANO*3300 [0.50] Spectroscopy of Nanomaterials
- NANO*3600 [0.50] Computational Methods in Materials Science
- 1.50 electives

### Summer Semester
- COOP*4000 [0.50] Co-op Work Term IV

### Fall Semester
- COOP*5000 [0.50] Co-op Work Term V

### Semester 8 -- Winter
- NANO*4200 [0.50] Topics in Nanomaterials
- 2.00 electives

* To take PHYS*3230 in semester 5, then PHYS*2340 must be selected as an elective in semester 4.

**Note**: In semesters 7 and 8, the student must select to do either NANO*4900 or NANO*4910.

### Neuroscience (NEUR)

Departments of Biomedical Sciences (Ontario Veterinary College), Human Health and Nutritional Sciences (College of Biological Science), Molecular & Cellular Biology (College of Biological Science), and Psychology (College of Social and Applied Human Science).

### Major (Honours Program)

This Honours program provides a foundation in the natural sciences and an opportunity to develop advanced knowledge of nervous system structure and function, and the skills required for independent inquiry within neuroscience. The specialization is unique in its emphasis on integrative/interdisciplinary problem solving. Through the use of electives, students may structure a program that emphasizes molecular and biomedical neuroscience, behavioural and cognitive neuroscience, or comparative neuroscience.

The major prepares students for professional programs in health science (medical, physiotherapy, pharmacy, veterinary medicine, nursing), post-graduate degrees in neuroscience research, and provides a strong foundation for students wishing to pursue careers in the pharmaceutical and biotechnology industries, public health, teaching, and scientific publishing & journalism.

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult with a Faculty Advisor. A minimum total of 20.00 credits is required to complete the major.

#### Semester 1
- BIOL*1080 [0.50] Biological Concepts of Health
- CHEM*1040 [0.50] General Chemistry I
- MATH*1080 [0.50] Elements of Calculus I
- PHYS*1080 [0.50] Physics for Life Sciences

0.50 Liberal Education elective

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at: [https://www.uoguelph.ca/bsc/revised_SS](https://www.uoguelph.ca/bsc/revised_SS)

#### Semester 2
- BIOL*1070 [0.50] Discovering Biodiversity
- BIOL*1080 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1050 [0.50] General Chemistry II
- CHEM*1060 [0.50] General Chemistry II
- MATH*1060 [0.50] Elements of Calculus II
- PHYS*1080 [0.50] Physics for Life Sciences

0.50 Liberal Education elective

#### Semester 3
- BIOL*2070 [0.50] Introduction to Biochemistry
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- NEUR*2000 [0.50] Introduction to Neuroscience

One of:
- PSYC*2040 [0.50] Statistics I
- PSYC*1010 [0.50] Making Sense of Data in Psychological Research

0.50 Liberal Education elective

#### Semester 4
- MCB*2050 [0.50] Molecular Biology of the Cell
- PHYS*2030 [0.50] Biophysics of Excitable Cells
- PSYC*3410 [0.50] Behavioural Neuroscience II

1.00 electives or restricted electives

**Note**: Physiology restricted elective (3) must be taken before registering in BIOM*3090 in semester 6.

#### Semester 5
- BIOM*3000 [0.50] Functional Mammalian Neuroanatomy

---

Last Revision: July 4, 2019
NEUR*3100 [0.50] Molecular Biology of Neurodevelopmental and Degenerative Disease
PSYC*3270 [0.50] Cognitive Neuroscience
1.00 electives or restricted electives

Note: Physiology restricted elective (# 3) must be taken before registering in BIOM*3090 in semester 6.

Semester 6
BIOM*3090 [0.50] Principles of Pharmacology
NEUR*3500 [0.50] Techniques in Neuroscience
1.50 electives or restricted electives

Semester 7
NEUR*4000 [0.50] Current Issues in Neuroscience
NEUR*4100 [0.50] Neuropharmacology
1.50 electives or restricted electives

Semester 8
2.50 electives or restricted electives

Restricted Electives
Students are advised to pay particular attention to pre-requisite requirements when choosing individual courses, and seek advice as needed. *Indicates courses that require additional prerequisites.

1. A minimum of 0.50 credits of Critical thinking/ Philosophy / Ethics from:
   - BIOM*3210 [0.50] Critical Thinking in the Health Sciences
   - PHIL*2100 [0.50] Critical Thinking
   - PHIL*2110 [0.50] Formal Logic
   - PHIL*2120 [0.50] Ethics
   - PHIL*2180 [0.50] Philosophy of Science
   - PHIL*2240 [0.50] Knowledge and Belief

Note: if a PHIL course is completed from this list, students are required to take an additional 0.50 credit approved science course as an elective to ensure the minimum science requirement is met.

2. A minimum of 0.50 credits of Developmental Biology
   - BIOM*3040 [0.75] Medical Embryology *
   - MBG*3040 [0.50] Molecular Biology of the Gene
   - ZOO*3050 [0.50] Developmental Biology

3. A minimum of 0.50 credits of Physiology
   - BIOM*3200 [1.00] Biomedical Physiology
   - HK*2810 [0.50] Human Physiology I - Concepts and Principles
   - ZOO*3600 [0.50] Comparative Animal Physiology I *

NOTE: If HK*2810 is completed in Semester 4, HK*3810 must be completed in Semester 5 in order to meet the BIOM*3090 pre-requisite requirement.

4. A minimum of 0.50 credits of additional statistics or experimental design
   - PSYC*3260 [0.50] Psychological Methods and Statistics
   - STAT*2050 [0.50] Statistics II

5. A minimum of 1.00 credits of Independent Study

For students who are interested in graduate studies, a research course is recommended.

* Indicates courses that have additional prerequisites.

** faculty advisor will determine if this course is an eligible science elective, depending on the instructor and topic

- BIOM*4500 [0.50] Literature-based Research in Biomedical Sciences
- BIOM*4510 [1.00] Research in Biomedical Sciences
- BIOM*4521/2 [2.00] Research in Biomedical Sciences
- HK*4230 [0.50] Advanced Study in Human Health and Nutritional Sciences
- HK*4360 [1.00] Research in Human Health and Nutritional Sciences
- HK*4371/2 [1.00] Research in Human Health and Nutritional Sciences II
- IBIO*4500 [1.00] Research in Integrative Biology I
- IBIO*4510 [1.00] Research in Integrative Biology II
- IBIO*4521/2 [2.00] Thesis in Integrative Biology
- MCB*4500 [1.00] Research Project in Molecular & Cellular Biology I *
- MCB*4510 [1.00] Research Project in Molecular & Cellular Biology *
- MCB*4600 [0.50] Topics in Molecular and Cellular Biology *
- NEUR*4401/2 [1.00] Research in Neurosciences
- NEUR*4450 [1.00] Research in Neurosciences
- PSYC*3240 [0.50] Independent Research Project **
- PSYC*4240 [0.50] Advanced Independent Research Project **
- PSYC*4870 [0.50] Honours Thesis I **
- PSYC*4880 [1.00] Honours Thesis II **

Lists of recommended electives
The following lists contain recommended electives for students wishing to emphasize particular areas in neuroscience.

*Indicates courses that require additional prerequisites.

**Psychology**
- PSYC*2330 [0.50] Principles of Learning
- PSYC*2390 [0.50] Sensation and Perception
- PSYC*2650 [0.50] Cognitive Psychology
- PSYC*3030 [0.50] Neurochemical Basis of Behaviour *
- PSYC*3100 [0.50] Evolutionary Psychology *
- PSYC*3330 [0.50] Memory and Attention *
- PSYC*3410 [0.50] Behavioural Neuroscience II
- PSYC*4470 [0.50] Advanced Topics in Behavioural and Cognitive Neuroscience
- PSYC*4750 [0.50] Seminar in Motivation and Emotion

**Computation, Modeling and Statistics**
- CIS*1300 [0.50] Programming
- CIS*2500 [0.50] Intermediate Programming *
- MATH*1090 [0.50] Elements of Calculus II
- MATH*1160 [0.50] Linear Algebra I
- MATH*2270 [0.50] Applied Differential Equations *
- MATH*3510 [0.50] Biomathematics *
- PSYC*3250 [0.50] Psychological Measurement *
- PSYC*3290 [0.50] Conducting Statistical Analyses in Psychology *
- STAT*3240 [0.50] Applied Regression Analysis *

**Biological Science**
- BIOC*3560 [0.50] Structure and Function in Biochemistry
- BIOC*4580 [0.50] Membrane Biochemistry *
- BIOM*4070 [0.50] Biomedical Histology *
- MBG*3050 [0.50] Human Genetics
- MCB*3010 [0.50] Dynamics of Cell Function and Signaling
- MCB*4010 [0.50] Advanced Cell Biology *
- ZOO*3000 [0.50] Comparative Histology *

**Health & Disease**
- BIOM*3040 [0.75] Medical Embryology *
- BIOM*4030 [0.50] Endocrine Physiology *
- BIOM*4050 [0.50] Biomedical Aspects of Aging *
- HK*3100 [0.50] Neuromuscular Physiology *
- HK*3810 [0.75] Human Physiology II - Integrated Systems *
- HK*4070 [0.50] Clinical Biomechanics *
- TOX*4000 [0.50] Medical Toxicology

Credit Summary (20.00 Total Credits)

4.00 – First year science core
7.00 – Required science courses semester 3-8
3.00 – Restricted elective (#1,2,3,4,5 in restricted electives list)
2.00 – Approved Science elective*
0.50 - Required Liberal Education elective (PSYC*1000)
1.00 – Liberal Education electives
2.50 – Free electives

Of the 20 total credits required, students must complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

*2.50 Approved Science Electives if a PHIL*XXXX course is selected for restricted electives #1

**Minor (Honours Program)**

A minor in Neuroscience requires a minimum of 5.00 credits including:

- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- PSYC*1000 [0.50] Introduction to Psychology
- PSYC*2330 [0.50] Principles of Learning

One of:
- NEUR*2000 [0.50] Introduction to Neuroscience
- PSYC*2410 [0.50] Behavioural Neuroscience I

One of:
- PSYC*1010 [0.50] Making Sense of Data in Psychological Research
- STAT*2040 [0.50] Statistics I

A minimum of 0.50 credits from:
- BIOM*2000 [0.50] Concepts in Human Physiology
- BIOM*3200 [1.00] Biomedical Physiology
- HK*2810 [0.50] Human Physiology I - Concepts and Principles
- ZOO*3600 [0.50] Comparative Animal Physiology I

A minimum of 2.00 credits from:
- BIOM*3000 [0.50] Functional Mammalian Neuroanatomy
- BIOM*3090 [0.50] Principles of Pharmacology
- BIOM*4030 [0.50] Endocrine Physiology

2019-2020 Undergraduate Calendar
Neuromuscular Physiology
Research in Human Health and Nutritional Sciences II
Nutrition and Metabolic Control of Disease
Developmental Biology
Statistics I
A minimum of 2.00 credits of Liberal Education electives is required. The list of
Liberal Education electives for B.Sc. students can be found at: https://
www.uoguelph.ca/bsc/

1.00 credits from the following:

- Biomedical Physiology
- General Chemistry I
- General Chemistry II
- Human Physiology I - Concepts and Principles
- Human Physiology II - Integrated Systems
- Memory and Attention

2.00 credits from the following:

- HK*3810
- MBG*3080
- MCB*2050
- NEUR*3100
- NEUR*4000
- NEUR*4100
- NEUR*4210
- NEUR*4320
- NUTR*3360
- NUTR*3390
- NUTR*4210
- NUTR*4360
- NUTR*4390
- NUTR*4510
- Principles of Pharmacology
- Principles of Disease
- Functional Foods and Nutraceuticals
- Lifestyle Genomics

Of the 2.00 additional credits, students may select one course from:

- BIO*M*3040
- MATH*1080
- PHYS*2330
- PSYC*2390
- PSYC*2650
- PSYC*3030
- PSYC*3270
- PSYC*3330
- PSYC*3410
- PSYC*4750
- ZOO*3050

Please note that some of the restricted electives require prerequisites that are not included in
the minor.

Nutritional and Nutraceutical Sciences (NANS)

Department of Human Health and Nutritional Sciences, College of Biological Science

The Nutritional and Nutraceutical Sciences major is concerned with understanding the
contribution of food, beverage and nutritional supplement consumption to growth,
development of optimal biological function, maintenance of health, and treatment of
disease.

If lacking the fundamentals of word processing, spreadsheet use and data management,
the student should select CIS*1200 as early in the program as possible.

Major (Honours Program)

Students may enter this major in Semester 1 or any semester thereafter. A student wishing
to declare the major may wish to consult the Faculty Advisor. A total of 20.00 credits is
required.

Semester 1

- BIO*L*1080 [0.50] Biological Concepts of Health
- CHEM*1040 [0.50] General Chemistry I
- MATH*1080 [0.50] Elements of Calculus I
- PHYS*1080 [0.50] Physics for Life Sciences
- 0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised
schedule of study for this major found at https://www.uoguelph.ca/bsc/revised_SS

Semester 2

- BIO*L*1070 [0.50] Discovering Biodiversity
- BIO*L*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1050 [0.50] General Chemistry II
- PHYS*1070 [0.50] Physics for Life Sciences II
- 0.50 Liberal Education electives

Semester 3

- BIO*C*2580 [0.50] Introduction to Biochemistry
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- STAT*2040 [0.50] Statistics I
- 0.50 electives or restricted electives
- 0.50 Liberal Education electives

Semester 4

- BIO*C*3560 [0.50] Structure and Function in Biochemistry
- HK*2810 [0.50] Human Physiology I - Concepts and Principles
- MCB*2050 [0.50] Molecular Biology of the Cell
- NUTR*3210 [0.50] Fundamentals of Nutrition
- 0.50 Liberal Education electives

Semester 5

- HK*3810 [0.75] Human Physiology II - Integrated Systems
- NUTR*3330 [0.50] Micronutrients, Phytochemicals and Health
- NUTR*3360 [0.50] Lifestyle Genomics
- NUTR*3390 [0.75] Applied Nutritional and Nutraceutical Sciences I

Semester 6

- BIOM*3090 [0.50] Principles of Pharmacology
- NUTR*4090 [0.50] Functional Foods and Nutraceuticals
- NUTR*4320 [0.50] Nutrition and Metabolic Control of Disease
- NUTR*4330 [0.75] Applied Nutritional and Nutraceutical Sciences II

Electives or restricted electives to a maximum of 2.75 total credits in this semester.

Semester 7

- NUTR*4210 [0.50] Nutrition, Exercise and Energy Metabolism
- NUTR*4510 [0.50] Toxicology, Nutrition and Food

1.50 electives or restricted electives

Semester 8

- 2.50 electives or restricted electives

Restricted Electives

1. A minimum of 2.00 credits of Liberal Education electives is required. The list of
Liberal Education electives for B.Sc. students can be found at: https://
www.uoguelph.ca/bsc/

2. 1.00 credits from the following:

- HK*4230 [0.50] Advanced Study in Human Health and Nutritional Sciences
- HK*4340 [0.50] Genomics: Exercise and Disease
- HK*4360 [1.00] Research in Human Health and Nutritional Sciences
- HK*4371/2 [1.00] Research in Human Health and Nutritional Sciences II
- HK*4510 [1.00] Teaching, Learning & Knowledge Transfer
- HK*4511/2 [1.00] Teaching, Learning & Knowledge Transfer II
- HK*4460 [0.50] Regulation of Human Metabolism
- NUTR*4360 [0.50] Current Issues in Nutrigenomics
- PATH*3610 [0.50] Principles of Disease

Credit Summary (20.00 Total Credits)

4.00 - First year science core
9.25 - Required science courses semesters 3 - 8
1.00 - Restricted electives (#2 in restricted electives list)
1.75 - Approved science electives
2.00 - Liberal Education electives (#1 in restricted electives list)
2.00 - Free electives - any approved electives for B.Sc. students.

Of the total credits required, students are required to complete 16.00 credits in science of
which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits
must be at the 3000 or 4000 level.

Minor (Honours Program)

A minor in Nutritional and Nutraceutical Sciences (NANS) requires 5.00 credits as follows:

- BIO*C*2580 [0.50] Introduction to Biochemistry
- NUTR*3210 [0.50] Fundamentals of Nutrition
- NUTR*3330 [0.50] Micronutrients, Phytochemicals and Health
- NUTR*4090 [0.50] Functional Foods and Nutraceuticals
- STAT*2040 [0.50] Statistics I

At least 0.50 credits from:

- ANSC*3080 [0.50] Agricultural Animal Physiology (restricted to ABIO majors)
- BIOM*3200 [1.00] Biomedical Physiology
- HK*2810 [0.50] Human Physiology I - Concepts and Principles
- ZOO*3600 [0.50] Comparative Animal Physiology I

and 2.00 credits from:

- ANSC*3170 [0.50] Nutrition of Fish and Crustacea
- ANSC*3180 [0.50] Wildlife Nutrition
- ANSC*4260 [0.50] Beef Cattle Nutrition
- ANSC*4270 [0.50] Dairy Cattle Nutrition
- ANSC*4280 [0.50] Poultry Nutrition
- ANSC*4290 [0.50] Swine Nutrition
- ANSC*4560 [0.50] Pet Nutrition
- EQN*4020 [0.50] Advanced Equine Nutrition
- FOOD*2010 [0.50] Principles of Food Science
- HK*3810 [0.75] Human Physiology II - Integrated Systems
- HK*4230 [0.50] Advanced Study in Human Health and Nutritional Sciences
- HK*4340 [0.50] Genomics: Exercise and Disease
- HK*4360 [1.00] Research in Human Health and Nutritional Sciences
- HK*4371/2 [1.00] Research in Human Health and Nutritional Sciences II
- HK*4510 [1.00] Teaching, Learning & Knowledge Transfer
- HK*4511/2 [1.00] Teaching, Learning & Knowledge Transfer II
- NUTR*3630 [0.50] Lifestyle Genomics
- NUTR*3390 [0.75] Applied Nutritional and Nutraceutical Sciences I
- NUTR*4210 [0.50] Nutrition, Exercise and Energy Metabolism
- NUTR*4320 [0.50] Nutrition and Metabolic Control of Disease
- NUTR*4330 [0.75] Applied Nutritional and Nutraceutical Sciences II
- NUTR*4360 [0.50] Current Issues in Nutrigenomics
- NUTR*4510 [0.50] Toxicology, Nutrition and Food

Physical Science (PSCI)

College of Engineering and Physical Sciences

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
Major (Honours Program)

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. This major will require the completion of 20.00 credits as indicated below:

1. **Basic Science Core - 4.00 credits**

   - 1.00 - Biology (BIOL*1070, BIOL*1080, BIOL*1090)
   - 1.00 - Chemistry (CHEM*1040, CHEM*1050)
   - 1.00 - Physics (PHYS*1080, (1 of PHYS*1010, PHYS*1070, PHYS*1130))
   - 1.00 - Mathematical Science ((MATH*1080, MATH*1090) or (MATH*1200, MATH*1210))

   * IPS*1500 can be taken instead of PHYS*1080 and MATH*1200, and IPS*1510 can be taken instead of PHYS*1010 and MATH*1210.

2. **Subject Area Core - 8.00 credits**

   - 0.50 STAT*2040
   - 0.50 (1 of CIS*1200, CIS*1300, CIS*1500)
   - 7.00 physical science credits, including at least 4.00 credits at the 3000 or 4000 level of which 2.00 credits must be at the 4000 level.

3. **Science Electives - 4.00 credits**

   - 4.00 science credits from the List of Approved Science Electives for B.Sc. Students*

4. **Liberal Education - 2.00**

   - 2.00 acceptable Liberal Education credits selected from the List of Approved B.Sc. Electives*

5. **Free Electives - 2.00 credits**

   **Note:** the program must include a total of 6.00 science credits at the 3000 or 4000 level. Of these, at least 2.00 credits must be physical science at the 4000 level.

**Semester 1**

- CHEM*1040 [0.50] General Chemistry I
  - One of:
    - PHYS*1080 [0.50] Physics for Life Sciences
    - PHYS*1130 [0.50] Physics with Applications

- MATH*1080 [0.50] Elements of Calculus I
- MATH*1200 [0.50] Calculus I

* IPS*1500 can be taken instead of PHYS*1080 and MATH*1200.

- One of:
  - BIOL*1070 [0.50] Discovering Biodiversity
  - BIOL*1080 [0.50] Biological Concepts of Health
  - BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology

- 0.50 Liberal Education electives

**Semester 2**

- CHEM*1050 [0.50] General Chemistry II

- One of:
  - PHYS*1010 [0.50] Introductory Electricity and Magnetism
  - PHYS*1080 [0.50] Physics for Life Sciences

- MATH*1210 [0.50] Calculus II
- MATH*1090 [0.50] Elements of Calculus II

* IPS*1510 can be taken instead of PHYS*1010 and MATH*1210.

- One of:
  - BIOL*1070 [0.50] Discovering Biodiversity
  - BIOL*1080 [0.50] Biological Concepts of Health
  - BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology

- 0.50 Liberal Education electives

**Semester 3**

- 1.50 science electives from the approved list of acceptable B.Sc. science electives*
- 0.50 electives

- One of:
  - CIS*1200 [0.50] Introduction to Computing
  - CIS*1300 [0.50] Programming
  - CIS*1500 [0.50] Introduction to Programming

- OR
  - STAT*2040 [0.50] Statistics I

**Semester 4**

- 1.50 science electives from the approved list of B.Sc. science electives*
- 0.50 electives

- One of:
  - CIS*1200 [0.50] Introduction to Computing
  - CIS*1300 [0.50] Programming
  - CIS*1500 [0.50] Introduction to Programming

*if a statistics course is chosen in Semester 3*

**Semester 5 to 8**

- Total of 2.50 credits per semester including at least 2.00 science electives.

- Sufficient courses at the 3000 or 4000 level must be selected in Semesters 5 through 8 to total 6.00 credits in science at the 3000 or 4000 level with at least 2.00 physical science at the 4000 level.

- *approved course lists are available in the B.Sc. Academic Counselling Office or at: [https://www.uoguelph.ca/bsc/approved_electives](https://www.uoguelph.ca/bsc/approved_electives)

**Credit Summary (20.00 Total Credits)**

- 4.00 - First year science credits
- 8.00 - Subject area core semesters 3 – 8 (including STAT 2040 and CIS 1200 or CIS 1500)
- 4.00 - Approved Science electives
- 2.00 - Liberal Education electives (# 1 in restricted elective list)
- 2.00 - Free electives - any approved elective for B.Sc. students. (could be less if restricted electives do not count as science)

**Honours Physical Science (With a Minor)**

The requirements and schedules are the same as for Honours Physical Science. Available Minor subjects are listed at the beginning of the B.Sc. Program section under the heading Honours Program Minors.

**Physics (PHYS)**

**Department of Physics, College of Engineering and Physical Sciences**

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. Since some of the required courses are not offered every semester, students entering the Major in Honours Physics should plan their program in consultation with the Department of Physics Faculty Advisor.

**Major (Honours Program)**

This major requires the completion of 20.00 credits. At least 1.00 credits must be from Arts and/or Social Science courses.

**Semester 1**

- CHEM*1040 [0.50] General Chemistry I
- CIS*1300 [0.50] Programming
- IPS*1500 [1.00] Integrated Mathematics and Physics I

- One of:
  - BIOL*1070 [0.50] Discovering Biodiversity
  - BIOL*1080 [0.50] Biological Concepts of Health
  - BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology

- Students who are lacking one 4U /grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies published at [https://www.uoguelph.ca/bsc/revised_SS](https://www.uoguelph.ca/bsc/revised_SS)

**Semester 2**

- CHEM*1050 [0.50] General Chemistry II

- One of:
  - PHYS*1010 [0.50] Introductory Electricity and Magnetism
  - PHYS*1080 [0.50] Physics for Life Sciences

- MATH*1210 [0.50] Calculus II
- MATH*1090 [0.50] Elements of Calculus II

* IPS*1510 can be taken instead of PHYS*1010 and MATH*1210.

- One of:
  - BIOL*1070 [0.50] Discovering Biodiversity
  - BIOL*1080 [0.50] Biological Concepts of Health
  - BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology

- 0.50 Liberal Education electives

**Semester 3**

- 1.50 science electives from the approved list of acceptable B.Sc. science electives*
- 0.50 electives

- One of:
  - CIS*1200 [0.50] Introduction to Computing
  - CIS*1300 [0.50] Programming
  - CIS*1500 [0.50] Introduction to Programming

- OR
  - STAT*2040 [0.50] Statistics I

**Semester 4**

- 1.50 science electives from the approved list of B.Sc. science electives*
- 0.50 electives

- One of:
  - CIS*1200 [0.50] Introduction to Computing
  - CIS*1300 [0.50] Programming
  - CIS*1500 [0.50] Introduction to Programming

* students who have taken physics courses other than IPS*1500 or PHYS*1080 in Semester 1 and IPS*1510 or PHYS*1010 in Semester 2, may proceed to semester 3 with the permission of the Department of Physics

**Semester 5**

- MATH*2200 [0.50] Advanced Calculus I
- MATH*2270 [0.50] Applied Differential Equations
- PHYS*2240 [0.50] Thermal Physics
- PHYS*2330 [0.50] Electricity and Magnetism I

- 0.50 Liberal Education electives

**Semester 6**

- PHYS*2180 [0.50] Experimental Techniques in Physics
- PHYS*2310 [0.50] Mechanics
- PHYS*2340 [0.50] Electricity and Magnetism II

- 1.00 electives

**Semester 7**

- IPS*3000 [0.50] Science Communication
- PHYS*3130 [0.50] Mathematical Physics

---

2019-2020 Undergraduate Calendar

Last Revision: July 4, 2019
PHYS*3230 [0.50] Quantum Mechanics I
PHYS*3400 [0.50] Advanced Mechanics

0.50 electives

Semester 6
NANO*3600 [0.50] Computational Methods in Materials Science
PHYS*3000 [0.50] Optics: Fundamentals and Applications
PHYS*3510 [0.50] Intermediate Laboratory
PHYS*4040 [0.50] Quantum Mechanics II
One of:
    MATH*3260 [0.50] Complex Analysis
0.50 electives

Semester 7+
PHYS*4500 [0.50] Advanced Physics Laboratory
PHYS*4180 [0.50] Advanced Electromagnetic Theory
One of:
    PHYS*4240 [0.50] Statistical Physics II
    PHYS*4001 [0.50] Research in Physics
0.50 electives

Semester 8+
One of:
    PHYS*4002 [0.50] Research in Physics
0.50 electives**
2.00 electives **
+ students going on to graduate school in physics should take PHYS*4001/2, PHYS*4120, PHYS*4130, PHYS*4150, PHYS*4240
** At least 1.00 credits must be from the restricted electives listed below.

Restricted Electives
PHYS*4120 [0.50] Atomic and Molecular Physics
PHYS*4130 [0.50] Subatomic Physics
PHYS*4150 [0.50] Solid State Physics

Credit Summary (20.00 Total Credits)
5.00 - First year science credits
8.50 - Required science courses semesters 3 – 8
1.00 - Restricted electives
1.50 - Approved Science electives
1.00 - Liberal Education electives
3.00 - Free electives - any approved elective for B.Sc. students

Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

Minor (Honours Program)
A minor in Physics requires 5.00 credits in interdisciplinary physical science or physics courses including:
PHYS*2180 [0.50] Experimental Techniques in Physics
PHYS*2310 [0.50] Mechanics
PHYS*2330 [0.50] Electricity and Magnetism I
PHYS*2340 [0.50] Electricity and Magnetism II
A maximum of 1.00 credits from the following courses may be used towards the minor:
PHYS*1010 [0.50] Introductory Electricity and Magnetism
PHYS*1070 [0.50] Physics for Life Sciences II
PHYS*1080 [0.50] Physics for Life Sciences
PHYS*1130 [0.50] Physics with Applications
IPS*1510 [1.00] Integrated Mathematics and Physics II
A minimum of 1.00 credits are required at the 3000 or 4000 level.

NOTE: PHYS*1300, PHYS*1600 and PHYS*1810 may not be taken for credit toward this minor.

Physics (Co-op) (PHYS:C)
Department of Physics, College of Engineering and Physical Sciences
Program Requirements
The Co-op program in Physics is a five year program, including five work terms. Students must complete a Fall, Winter and Summer work term and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruteguelph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Physics Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (22.00 Total Credits)*
5.00 - First year science credits
8.50 - Required science courses semesters 3 – 8
1.00 - Restricted electives
1.50 - Approved Science electives
1.00 - Liberal Education electives
3.00 - Free electives - any approved elective for B.Sc. students
2.00 - Co-op Work Terms

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

Note: A minimum of four Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. A fifth Co-op work term is optional and if completed, the total number of credits will equal 22.50

The recommended program sequence is outlined below.

Major (Honours Program)
Semester 1 - Fall
CHEM*1040 [0.50] General Chemistry I
CIS*1300 [0.50] Programming
IPS*1500 [1.00] Integrated Mathematics and Physics I
One of:
    BIOL*1070 [0.50] Discovering Biodiversity
    BIOL*1080 [0.50] Biological Concepts of Health
    BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology

Students who are lacking one 4U /grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at: https://www.uoguelph.ca/bsc/revised_SS

Semester 2 - Winter
CHEM*1050 [0.50] General Chemistry II
IPS*1510 [1.00] Integrated Mathematics and Physics II
MATH*1160 [0.50] Linear Algebra I
One of:
    BIOL*1070 [0.50] Discovering Biodiversity
    BIOL*1080 [0.50] Biological Concepts of Health
    BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology

Semester 3 - Fall
COOP*1100 [0.00] Introduction to Co-operative Education
MATH*2200 [0.50] Advanced Calculus I
MATH*2270 [0.50] Applied Differential Equations
PHYS*2240 [0.50] Thermal Physics
PHYS*2330 [0.50] Electricity and Magnetism I
0.50 Liberal Education electives*

Semester 4 - Winter
PHYS*2180 [0.50] Experimental Techniques in Physics
PHYS*2310 [0.50] Mechanics
PHYS*2340 [0.50] Electricity and Magnetism II
One of:
    CIS*2500 [0.50] Intermediate Programming
0.50 electives
0.50 electives

Summer Semester
COOP*1000 [0.50] Co-op Work Term I ++

Last Revision: July 4, 2019
2019-2020 Undergraduate Calendar
<table>
<thead>
<tr>
<th>Semester 5 - Fall</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IPS*3000</td>
<td>[0.50]</td>
<td>Science Comm.</td>
</tr>
<tr>
<td>PHYS*3130</td>
<td>[0.50]</td>
<td>Math. Phys.</td>
</tr>
<tr>
<td>PHYS*3230</td>
<td>[0.50]</td>
<td>Quantum Mech. I</td>
</tr>
<tr>
<td>PHYS*3400</td>
<td>[0.50]</td>
<td>Advanced Mech.</td>
</tr>
<tr>
<td>0.50 electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Winter Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COOP*2000</td>
<td>[0.50]</td>
<td>Co-op Work Term II ++</td>
</tr>
<tr>
<td>(8-month work term in conjunction with COOP*3000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Summer Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COOP*3000</td>
<td>[0.50]</td>
<td>Co-op Work Term III ++</td>
</tr>
<tr>
<td>(8-month work term in conjunction with COOP*2000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Semester 6 - Fall +</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS*4180</td>
<td>[0.50]</td>
<td>Advanced Electromagnetic Theory</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI[ ]*2520</td>
<td>[0.50]</td>
<td>Data Structures</td>
</tr>
<tr>
<td>0.50 electives**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS*4240</td>
<td>[0.50]</td>
<td>Statistical Phys. II</td>
</tr>
<tr>
<td>0.50 electives**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.00 electives **</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Semester 7 - Winter +</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NANO*3600</td>
<td>[0.50]</td>
<td>Computational Methods in Materials Science</td>
</tr>
<tr>
<td>PHYS*3000</td>
<td>[0.50]</td>
<td>Optics: Fundamentals and Applications</td>
</tr>
<tr>
<td>PHYS*3510</td>
<td>[0.50]</td>
<td>Intermediate Laboratory</td>
</tr>
<tr>
<td>PHYS*4040</td>
<td>[0.50]</td>
<td>Quantum Mechanics II</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH*3260</td>
<td>[0.50]</td>
<td>Complex Analysis</td>
</tr>
<tr>
<td>0.50 electives**</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Summer Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COOP*4000</td>
<td>[0.50]</td>
<td>Co-op Work Term IV ++</td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COOP*5000</td>
<td>[0.50]</td>
<td>Co-op Work Term V ++</td>
</tr>
<tr>
<td><strong>Semester 8 - Winter +</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS*4500</td>
<td>[0.50]</td>
<td>Advanced Physics Laboratory</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS*4130</td>
<td>[0.50]</td>
<td>Subatomic Phys.</td>
</tr>
<tr>
<td>0.50 electives**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS*4150</td>
<td>[0.50]</td>
<td>Solid State Phys.</td>
</tr>
<tr>
<td>0.50 electives**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.00 electives **</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Semester 9 - Winter +</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBG*2000</td>
<td>[0.50]</td>
<td>Subatomic Physics</td>
</tr>
<tr>
<td>PHYS*4240</td>
<td>[0.50]</td>
<td>Statistical Phys. II</td>
</tr>
<tr>
<td>0.50 electives**</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plant Science (PLSC)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Plant Agriculture, Ontario Agricultural College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School of Environmental Sciences, Ontario Agricultural College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Integrative Biology, College of Biological Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Molecular and Cellular Biology, College of Biological Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Major (Honours Program)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. The major requires the completion of 20.00 credits.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Semester 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL*1070</td>
<td>[0.50]</td>
<td>Discovering Biodiversity</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>[0.50]</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>ENGL*1030</td>
<td>[0.50]</td>
<td>Effective Writing</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>[0.50]</td>
<td>Elements of Calculus I</td>
</tr>
<tr>
<td>PHYS*1080</td>
<td>[0.50]</td>
<td>Physics for Life Sciences</td>
</tr>
<tr>
<td>Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at: <a href="https://www.uoguelph.ca/bsc/revised_SS">https://www.uoguelph.ca/bsc/revised_SS</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Semester 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL*1090</td>
<td>[0.50]</td>
<td>Introduction to Molecular and Cellular Biology</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>[0.50]</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>PHYS*1070</td>
<td>[0.50]</td>
<td>Physics for Life Sciences II</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI[ ]*1200</td>
<td>[0.50]</td>
<td>Introduction to Computing</td>
</tr>
</tbody>
</table>

X. Degree Programs, Bachelor of Science (B.Sc.)

Last Revision: July 4, 2019
X. Degree Programs, Bachelor of Science (B.Sc.)

2.50 - Free electives - any approved elective for B.Sc. Students (could be less if restricted electives do not count as science)

Of the total credits required, students are required to complete a minimum of 16.00 credits in science, of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

Option B

4.00 - First year science core

5.00 - Required science courses semesters 3 - 8

1.00 - AGR*4600

5.00 - Restricted electives for the declared area of emphasis (#2) (some restricted electives do not count as science electives towards the degree therefore additional science electives may be required)

2.00 - Approved science electives, if all restricted electives chosen are approved science electives (can be reduced to 1.00 of approved science electives if AGR*4600 is approved as science by faculty advisor and all restricted electives chosen are approved science electives)

1.00 - Liberal Education electives

0.50 - ENGL*1030

1.50 - Free electives - any approved elective for B.Sc. Students (could be less if restricted electives do not count as science)

Of the total credits required, students are required to complete a minimum of 16.00 credits in science, of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

Area of Emphasis

Applied Plant Science (APSC)

CROP*4240 [0.50] Weed Science
ENVS*2060 [0.50] Soil Science
ENVS*3210 [0.50] Plant Pathology
ENVS*4100 [0.50] Integrated Management of Invasive Insect Pests **

‡ 3.00 credits from:

AGR*3450 [0.50] Research Methods in Agricultural Science
BOT*3710 [0.50] Plant Diversity and Evolution
CROP*3300 [0.50] Grain Crops
CROP*3310 [0.50] Protein and Oilsed Crops
CROP*3340 [0.50] Managed Grasslands
CROP*4220 [0.50] Cropping Systems **
ENVS*2040 [0.50] Plant Health and the Environment
ENVS*3020 [0.50] Pesticides and the Environment
ENVS*3080 [0.50] Soil and Water Conservation **
ENVS*3140 [0.50] Management of Turfgrass Diseases **
ENVS*3310 [0.50] Soil Biodiversity and Ecosystem Function **
ENVS*4090 [0.50] Soil Management
HORT*2450 [0.50] Introduction to Turfgrass Science
HORT*3010 [0.50] Annual, Perennial and Indoor Plants - Identification and Use
HORT*3050 [0.50] Management of Turfgrass Insect Pests and Weeds **
HORT*3150 [0.50] Principles and Applications of Plant Propagation
HORT*3270 [0.50] Medicinal Plants
HORT*3280 [0.50] Greenhouse Production
HORT*3310 [0.50] Plants, Food and Health
HORT*3430 [0.50] Wine-Grape Culture
HORT*3510 [0.50] Vegetable Production
HORT*4200 [0.50] Plants, the Environment and Society
HORT*4300 [0.50] Postharvest Physiology
HORT*4420 [0.50] Fruit Crops
HORT*4450 [0.50] Advanced Turfgrass Science
LARC*2240 [0.50] Plants in the Landscape
MBG*2400 [0.50] Fundamentals of Plant and Animal Genetics
MBG*3100 [0.50] Plant Genetics
MBG*4160 [0.50] Plant Breeding
OAGR*2070 [1.00] Introduction to Organic Agriculture
OAGR*4050 [1.00] Design of Organic Production Systems **
PBIO*3110 [0.50] Crop Physiology
PBIO*3750 [0.50] Plant Tissue Culture
PBIO*4750 [0.50] Genetic Engineering of Plants
STAT*2050 [0.50] Statistics II
STAT*3210 [0.50] Experimental Design

Botany (BOT)

BOT*3050 [0.50] Plant Functional Ecology
MBG*3100 [0.50] Plant Genetics
PBIO*4000 [0.50] Molecular and Cellular Aspects of Plant-Microbe Interactions
PBIO*4150 [0.50] Molecular and Cellular Aspects of Plant Development

‡ 3.00 credits from:

AGR*3450 [0.50] Research Methods in Agricultural Science
BOT*3710 [0.50] Plant Diversity and Evolution
MBG*4300 [0.50] Plant Molecular Genetics
MICR*2420 [0.50] Introduction to Microbiology
MICR*3090 [0.50] Mycology
MICR*3320 [0.50] Plant Microbiology
PBIO*3110 [0.50] Crop Physiology
PBIO*3750 [0.50] Plant Tissue Culture
PBIO*4750 [0.50] Genetic Engineering of Plants
STAT*2050 [0.50] Statistics II

Plant Biotechnology (PBTC)

MBG*3100 [0.50] Plant Genetics
MBG*3350 [0.75] Laboratory Methods in Molecular Biology
PBIO*3750 [0.50] Plant Tissue Culture
PBIO*4750 [0.50] Genetic Engineering of Plants

‡ minimum of 2.75 credits from:

AGR*3450 [0.50] Research Methods in Agricultural Science
BOT*3710 [0.50] Plant Diversity and Evolution
BIOL*3300 [0.50] Applied Biometrics
MBG*2400 [0.50] Fundamentals of Plant and Animal Genetics
MBG*3660 [0.50] Genomics
MBG*4160 [0.50] Plant Breeding
MBG*4300 [0.50] Plant Molecular Genetics
MCB*4010 [0.50] Advanced Cell Biology
MICR*2420 [0.50] Introduction to Microbiology
MICR*3220 [0.50] Plant Microbiology
MICR*3320 [0.50] Immunology
MICR*3330 [0.50] World of Viruses
PBIO*3110 [0.50] Crop Physiology
PBIO*4150 [0.50] Molecular and Cellular Aspects of Plant Development
STAT*2050 [0.50] Statistics II
STAT*3210 [0.50] Experimental Design **

Plant Environmental Science (PESC)

BOT*3050 [0.50] Plant Functional Ecology
ENVS*2040 [0.50] Plant Health and the Environment
ENVS*4350 [0.50] Forest Ecology
GEOL*2480 [0.50] Mapping and GIS

‡ 3.00 credits from:

AGR*3450 [0.50] Research Methods in Agricultural Science
BIOL*3010 [0.50] Laboratory and Field Work in Ecology
BIOL*3060 [0.50] Populations, Communities & Ecosystems
BIOL*3130 [0.50] Conservation Biology
BIOL*4500 [0.50] Natural Resource Policy Analysis
BOT*3710 [0.50] Plant Diversity and Evolution
ENVS*2060 [0.50] Soil Science
ENVS*2120 [0.50] Introduction to Environmental Stewardship **
ENVS*2330 [0.50] Current Issues in Ecosystem Science and Biodiversity
ENVS*3000 [0.50] Nature Interpretation
ENVS*3020 [0.50] Pesticides and the Environment
ENVS*3040 [0.50] Natural Chemicals in the Environment
ENVS*3090 [0.50] Insect Diversity and Biology
ENVS*3210 [0.50] Plant Pathology
ENVS*3250 [0.50] Forest Health and Disease
ENVS*4100 [0.50] Integrated Management of Invasive Insect Pests **
GEOL*2210 [0.50] Environment and Resources
GEOL*3210 [0.50] Management of the Biophysical Environment **
GEOL*4210 [0.50] Environmental Governance **
GEOL*4220 [0.50] Local Environmental Management
HORT*3310 [0.50] Plants, Food and Health
LARC*3220 [0.50] Principles of Landscape Ecology **
PHIL*2070 [0.50] Philosophy of the Environment
POLS*3310 [0.50] Environmental Politics and Governance
STAT*2050 [0.50] Statistics II
STAT*3210 [0.50] Experimental Design **

Unspecialized (UNSP)

Choose 5.00 credits from any courses listed in the other areas of emphasis.

Minor (Honours Program)

A minor in Plant Science requires a minimum of 5.00 credits in the Plant Science Program chosen in consultation with the Faculty Advisor. The courses include:

AGR*2470 [0.50] Introduction to Plant Agriculture
BOT*2100 [0.50] Life Strategies of Plants
BOT*3310 [0.50] Plant Growth and Development
BOT*3410 [0.50] Plant Anatomy
BOT*3710 [0.50] Plant Diversity and Evolution
BOTH 4380 [0.50] Metabolism in the Whole Life of Plants
2.00 credits from any courses listed in the areas of emphasis.
Restricted electives indicated with * are non-science electives. Restricted electives indicated with ** require other restricted electives as prerequisites.

Statistics (STAT)

Department of Mathematics and Statistics, College of Engineering and Physical Sciences

Statistics plays a fundamental role in virtually all scientific disciplines, including biology, physics, chemistry, medicine, epidemiology, kinesiology, and toxicology. Students minoring in Statistics will develop practical skills in data visualization and analysis, statistical computing, technical writing and communication in a variety of applications areas, preparing them well for careers in the modern workplace.

Students may declare this minor in any semester.

Minor (Honours Program)

A total of 5.00 credits is required to complete the minor, including:

(MATH*1080 or MATH*1200)*
(MATH*1090 or MATH*1210)**
MATH*1160 [0.50] Linear Algebra I
STAT*2040 [0.50] Statistics I
STAT*2050 [0.50] Statistics II
STAT*3100 [0.50] Introductory Mathematical Statistics I
STAT*3110 [0.50] Introductory Mathematical Statistics II
STAT*3240 [0.50] Applied Regression Analysis
0.50 additional credits in Statistics
0.50 additional credits in Statistics or Mathematics at the 2000 level or above
* IPS*1500 can count toward this 0.50 credit
** IPS*1510 can count toward this 0.50 credit

Note: Students majoring in Mathematical Science cannot minor in Statistics.

Theoretical Physics (THPY)

Department of Physics, College of Engineering and Physical Sciences

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. A minimum total of 20.00 credits is required to complete the major. Students entering the major in Theoretical Physics should plan their program in consultation with the Faculty Advisor.

Major (Honours Program)

This major requires the completion of 20.00 credits. At least 1.00 of these credits must be obtained from the completion of Liberal Education electives.

Semester 1

CHEM*1040 [0.50] General Chemistry I
CIS*1300 [0.50] Programming
IPS*1500 [1.00] Integrated Mathematics and Physics I
One of:
 BIOL*1070 [0.50] Discovering Biodiversity
 BIOL*1080 [0.50] Biological Concepts of Health
 BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology

Students who are lacking one 4U /grade 12 course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The required first-year science courses in that subject should be completed according to the revised schedule of studies available at: https://www.queensu.ca/bsc/revised_SS

Semester 2

CHEM*1050 [0.50] General Chemistry II
IPS*1510 [1.00] Integrated Mathematics and Physics II
MATH*1160 [0.50] Linear Algebra I
One of:
 BIOL*1070 [0.50] Discovering Biodiversity
 BIOL*1080 [0.50] Biological Concepts of Health
 BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology

Note: students who have taken physics courses other than IPS*1500 or PHYS*1080 in Semester 1 and IPS*1510 or PHYS*1010 in Semester 2, may proceed to semester 3 with the permission of the Department of Physics.

Semester 3

MATH*2200 [0.50] Advanced Calculus I
MATH*2270 [0.50] Applied Differential Equations
PHYS*2240 [0.50] Thermal Physics
PHYS*2330 [0.50] Electricity and Magnetism I
0.50 Liberal Education electives

Semester 4

MATH*2210 [0.50] Advanced Calculus II
PHYS*2180 [0.50] Experimental Techniques in Physics
PHYS*2310 [0.50] Mechanics
PHYS*2340 [0.50] Electricity and Magnetism II
0.50 electives*

Semester 5

IPS*3000 [0.50] Science Communication
PHYS*3130 [0.50] Mathematical Physics
PHYS*3230 [0.50] Quantum Mechanics I
PHYS*3400 [0.50] Advanced Mechanics
0.50 electives*

Semester 6

NANO*3600 [0.50] Computational Methods in Materials Science
PHYS*3000 [0.50] Optics: Fundamentals and Applications
PHYS*3510 [0.50] Intermediate Laboratory
PHYS*4040 [0.50] Quantum Mechanics II
0.50 electives*

Semester 7

PHYS*4120 [0.50] Atomic and Molecular Physics
PHYS*4180 [0.50] Advanced Electromagnetic Theory
PHYS*4240 [0.50] Statistical Physics II
Two of:
 PHYS*4001 [0.50] Research in Physics
 PHYS*4500 [0.50] Advanced Physics Laboratory
0.50 electives*
0.50 electives*

*Restricted Electives

Students must complete 2.00 credits from the following list:

CIS*2500 [0.50] Intermediate Programming
MATH*2000 [0.50] Proofs, Sets, and Numbers
MATH*2130 [0.50] Numerical Methods
MATH*3100 [0.50] Differential Equations II
MATH*3130 [0.50] Abstract Algebra
MATH*3160 [0.50] Linear Algebra II
MATH*3200 [0.50] Real Analysis
MATH*3240 [0.50] Operations Research

Credit Summary (20.00 Total Credits)

5.00 - First year science credits
11.00 - Required science courses semesters 3 – 8
2.00 - Restricted electives
1.00 - Liberal Education electives
1.00 - Free electives - any approved elective for B.Sc. students. , could be less if restricted electives do not count as science

Of the total credits required, students are required to complete 16.00 credits in science of which 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

Wildlife Biology and Conservation (WBC)

Department of Integrative Biology, College of Biological Science

The core of this major will provide students with an integrated foundation in three disciplines necessary to understand the origins, interactions, and protection of biological diversity: evolution, ecology, and conservation biology. After the second semester, the student has the opportunity to take a wide variety of electives, including courses that meet his/her specific interests within one or two of these disciplines. The program offers a sound scientific background in preparation for careers in resource management, conservation, ecological consulting, teaching, and government service. This major also qualifies students for post-graduate work in ecology, evolutionary biology, environmental sciences, or wildlife management.

Major (Honours Program)

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major may wish to consult the Faculty Advisor. A minimum total of 20.00 credits is required to complete the major.

Semester 1

BIOL*1070 [0.50] Discovering Biodiversity
CHEM*1040 [0.50] General Chemistry I
MATH*1080 [0.50] Elements of Calculus I
PHYS*1080 [0.50] Physics for Life Sciences
0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at https://www.queensu.ca/bsc/revised_SS.
Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1080</td>
<td>0.50</td>
<td>Biological Concepts of Health</td>
</tr>
<tr>
<td>BIOL*1090</td>
<td>0.50</td>
<td>Introduction to Molecular and Cellular Biology</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>0.50</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>PHYS*1070</td>
<td>0.50</td>
<td>Physics for Life Sciences II</td>
</tr>
</tbody>
</table>

0.50 Liberal Education electives

Semester 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC*2580</td>
<td>0.50</td>
<td>Introduction to Biochemistry</td>
</tr>
<tr>
<td>MBG*2040</td>
<td>0.50</td>
<td>Foundations in Molecular Biology and Genetics</td>
</tr>
</tbody>
</table>

1.50 electives or restricted electives

Semester 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2060</td>
<td>0.50</td>
<td>Ecology</td>
</tr>
<tr>
<td>BIOL*2400</td>
<td>0.50</td>
<td>Evolution</td>
</tr>
<tr>
<td>STAT*2230</td>
<td>0.50</td>
<td>Biostatistics for Integrative Biology</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

Semester 5

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3010</td>
<td>0.50</td>
<td>Laboratory and Field Work in Ecology</td>
</tr>
</tbody>
</table>

2.00 electives or restricted electives

Semester 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3040</td>
<td>0.50</td>
<td>Methods in Evolutionary Biology</td>
</tr>
<tr>
<td>BIOL*3060</td>
<td>0.50</td>
<td>Populations, Communities &amp; Ecosystems</td>
</tr>
<tr>
<td>BIOL*3130</td>
<td>0.50</td>
<td>Conservation Biology</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

Semester 7

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4110</td>
<td>1.00</td>
<td>Ecological Methods</td>
</tr>
<tr>
<td>BIOL*4150</td>
<td>0.50</td>
<td>Wildlife Conservation and Management</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

Note: For students considering graduate research programs, BIOL*4110 may be substituted by an independent research course (1.00 credits minimum). Course options include: (IBIO*4500 and IBIO*4510), IBIO*4521/IBIO*4522.

Semester 8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4500</td>
<td>0.50</td>
<td>Natural Resource Policy Analysis</td>
</tr>
</tbody>
</table>

2.00 electives or restricted electives

Restricted Electives

Note that some courses have prerequisites, so be sure to consult the undergraduate calendar.

1. A minimum of 1.00 credits of Liberal Education electives is required. The list of Liberal Education electives for B.Sc. students can be found at: [https://www.uoguelph.ca/bsc/]

2. A minimum of 0.50 credits from:
   - BOT*2100 [0.50] Life Strategies of Plants
   - ZOO*2090 [0.50] Vertebrate Structure and Function
   - ZOO*2700 [0.50] Invertebrate Morphology & Evolution

3. A minimum of 0.50 credits from:
   - BOT*3050 [0.50] Plant Functional Ecology
   - ZOO*3600 [0.50] Comparative Animal Physiology I

4. A minimum of 0.50 credits from:
   - BIOL*3020 [0.50] Population Genetics
   - BIOL*4120 [0.50] Evolutionary Ecology

5. A minimum of 3.00 credits from any of the following lists of courses. The courses are broken into disciplines for which they are most suitable to help students tailor their electives towards a specific field if desired.

   *Some of the restricted electives will require additional courses outside of the required courses listed in Semesters 3-8

   ** Please note not all restricted electives are considered science electives for B.Sc students. If the non-science restricted electives are chosen, students are reminded that they will still be responsible for meeting the minimum of 16.00 credits in science and that the credit summary may vary from what is specified below.

Evolution

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3020</td>
<td>0.50</td>
<td>Population Genetics</td>
</tr>
<tr>
<td>BIOL*3300</td>
<td>0.50</td>
<td>Applied Bioinformatics</td>
</tr>
<tr>
<td>BOT*3710</td>
<td>0.50</td>
<td>Plant Diversity and Evolution</td>
</tr>
<tr>
<td>ENV*3090</td>
<td>0.50</td>
<td>Insect Diversity and Biology</td>
</tr>
<tr>
<td>ENV*3180</td>
<td>0.50</td>
<td>Sedimentary Environments *</td>
</tr>
<tr>
<td>MBG*3140</td>
<td>0.50</td>
<td>Molecular Biology of the Gene</td>
</tr>
<tr>
<td>MBG*4110</td>
<td>0.50</td>
<td>Epigenetics *</td>
</tr>
<tr>
<td>MBG*4270</td>
<td>0.50</td>
<td>DNA Replication, Recombination and Repair *</td>
</tr>
<tr>
<td>ZOO*2700</td>
<td>0.50</td>
<td>Invertebrate Morphology &amp; Evolution</td>
</tr>
<tr>
<td>ZOO*3050</td>
<td>0.50</td>
<td>Developmental Biology</td>
</tr>
</tbody>
</table>

Ecology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*3180</td>
<td>0.50</td>
<td>Wildlife Nutrition *</td>
</tr>
<tr>
<td>BIOL*3450</td>
<td>0.50</td>
<td>Introduction to Aquatic Environments</td>
</tr>
<tr>
<td>ENV*3000</td>
<td>0.50</td>
<td>Nature Interpretation</td>
</tr>
<tr>
<td>ENV*3270</td>
<td>0.50</td>
<td>Forest Biodiversity *</td>
</tr>
<tr>
<td>ENVS*4350</td>
<td>0.50</td>
<td>Forest Ecology *</td>
</tr>
<tr>
<td>NUTR*3210</td>
<td>0.50</td>
<td>Fundamentals of Nutrition</td>
</tr>
<tr>
<td>ZOO*4300</td>
<td>0.75</td>
<td>Marine Biology and Oceanography *</td>
</tr>
<tr>
<td>ZOO*4570</td>
<td>0.50</td>
<td>Marine Ecological Processes *</td>
</tr>
</tbody>
</table>

Conservation

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4350</td>
<td>0.50</td>
<td>Limnology of Natural and Polluted Waters *</td>
</tr>
<tr>
<td>ECON*1050</td>
<td>0.50</td>
<td>Introductory Microeconomics</td>
</tr>
<tr>
<td>ECON*2100</td>
<td>0.50</td>
<td>Economic Growth and Environmental Quality **</td>
</tr>
<tr>
<td>ENV*2030</td>
<td>0.50</td>
<td>Meteorology and Climatology</td>
</tr>
<tr>
<td>ENV*3010</td>
<td>0.50</td>
<td>Climate Change Biology</td>
</tr>
<tr>
<td>FARE*2700</td>
<td>0.50</td>
<td>Survey of Natural Resource Economics **</td>
</tr>
<tr>
<td>GEOG*1220</td>
<td>0.50</td>
<td>Human Impact on the Environment **</td>
</tr>
<tr>
<td>GEOG*2480</td>
<td>0.50</td>
<td>Mapping and GIS</td>
</tr>
<tr>
<td>GEOG*3480</td>
<td>0.50</td>
<td>GIS and Spatial Analysis</td>
</tr>
<tr>
<td>GEOG*4230</td>
<td>0.50</td>
<td>Environmental Impact Assessment *</td>
</tr>
<tr>
<td>GEOG*4480</td>
<td>1.00</td>
<td>Applied Geomatics</td>
</tr>
</tbody>
</table>

Integrative/Cross-Disciplinary

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBIO*4500</td>
<td>1.00</td>
<td>Research in Integrative Biology I</td>
</tr>
<tr>
<td>IBIO*4510</td>
<td>1.00</td>
<td>Research in Integrative Biology II</td>
</tr>
<tr>
<td>IBIO*4521/2</td>
<td>2.00</td>
<td>Thesis in Integrative Biology</td>
</tr>
<tr>
<td>MCB*2050</td>
<td>0.50</td>
<td>Molecular Biology of the Cell</td>
</tr>
<tr>
<td>ZOO*3610</td>
<td>0.25</td>
<td>Lab Studies in Animal Physiology I</td>
</tr>
<tr>
<td>ZOO*3620</td>
<td>0.50</td>
<td>Comparative Animal Physiology II</td>
</tr>
<tr>
<td>ZOO*3630</td>
<td>0.25</td>
<td>Lab Studies in Animal Physiology II</td>
</tr>
<tr>
<td>ZOO*3700</td>
<td>0.50</td>
<td>Integrative Biology of Invertebrates *</td>
</tr>
<tr>
<td>ZOO*4070</td>
<td>0.50</td>
<td>Animal Behaviour</td>
</tr>
<tr>
<td>ZOO*4910</td>
<td>0.50</td>
<td>Integrative Vertebrate Biology *</td>
</tr>
<tr>
<td>ZOO*4920</td>
<td>0.25</td>
<td>Lab Studies in Ornithology</td>
</tr>
<tr>
<td>ZOO*4940</td>
<td>0.25</td>
<td>Lab Studies in Herpetology</td>
</tr>
<tr>
<td>ZOO*4950</td>
<td>0.25</td>
<td>Lab Studies in Mammalogy</td>
</tr>
</tbody>
</table>

Field Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4410</td>
<td>0.75</td>
<td>Field Ecology</td>
</tr>
<tr>
<td>BIOL*4610</td>
<td>0.75</td>
<td>Arctic Ecology</td>
</tr>
<tr>
<td>BIOL*4700</td>
<td>0.50</td>
<td>Field Biology</td>
</tr>
<tr>
<td>BIOL*4710</td>
<td>0.25</td>
<td>Field Biology</td>
</tr>
<tr>
<td>BIOL*4800</td>
<td>0.50</td>
<td>Field Biology</td>
</tr>
<tr>
<td>BIOL*4810</td>
<td>0.25</td>
<td>Field Biology</td>
</tr>
<tr>
<td>BIOL*4900</td>
<td>0.50</td>
<td>Field Biology</td>
</tr>
</tbody>
</table>

Credit Summary (20.00 Total Credits)

4.00 - First year science core
6.50 - Required science courses semesters 3 - 8
4.50 - Restricted electives (# 2, 3, 4 and 5 in restricted electives list)**
1.00 - Approved Science electives
1.00 - Liberal Education electives (#1 in restricted electives list)
3.00 - Free electives - any approved elective for B.Sc. students

** Please note not all restricted electives are considered science electives for B.Sc students. If the science restricted electives are chosen, students are reminded that they will still be responsible for meeting the minimum of 16.00 credits in science and that the credit summary may vary from what is specified below.

Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1070</td>
<td>0.50</td>
<td>Discovering Biodiversity</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>0.50</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>0.50</td>
<td>Elements of Calculus I</td>
</tr>
<tr>
<td>PHYS*1080</td>
<td>0.50</td>
<td>Physics for Life Sciences</td>
</tr>
</tbody>
</table>

0.50 Liberal Education electives

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at [https://www.uoguelph.ca/bsc/revised_SS]

Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1080</td>
<td>0.50</td>
<td>Biological Concepts of Health</td>
</tr>
<tr>
<td>BIOL*1090</td>
<td>0.50</td>
<td>Introduction to Molecular and Cellular Biology</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>0.50</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>PHYS*1070</td>
<td>0.50</td>
<td>Physics for Life Sciences II</td>
</tr>
</tbody>
</table>

Last Revision: July 4, 2019 2019-2020 Undergraduate Calendar
0.50 Liberal Education electives

**Semester 3**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2060</td>
<td>0.50</td>
<td>Ecology</td>
</tr>
<tr>
<td>BIOL*2400</td>
<td>0.50</td>
<td>Evolution</td>
</tr>
<tr>
<td>ZOO*2090</td>
<td>0.50</td>
<td>Vertebrate Structure and Function</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives *

**Semester 4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC*2580</td>
<td>0.50</td>
<td>Introduction to Biochemistry</td>
</tr>
<tr>
<td>MBG*2040</td>
<td>0.50</td>
<td>Foundations in Molecular Biology and Genetics</td>
</tr>
<tr>
<td>STAT*2230</td>
<td>0.50</td>
<td>Biostatistics for Integrative Biology</td>
</tr>
<tr>
<td>ZOO*2700</td>
<td>0.50</td>
<td>Invertebrate Morphology &amp; Evolution</td>
</tr>
</tbody>
</table>

0.50 electives or restricted electives *

**Semester 5**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOO*3000</td>
<td>0.50</td>
<td>Comparative Histology</td>
</tr>
<tr>
<td>ZOO*3600</td>
<td>0.50</td>
<td>Comparative Animal Physiology I</td>
</tr>
<tr>
<td>ZOO*3610</td>
<td>0.25</td>
<td>Lab Studies in Animal Physiology I</td>
</tr>
<tr>
<td>ZOO*3700</td>
<td>0.50</td>
<td>Integrative Biology of Invertebrates</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives to a maximum of 2.75 total credits in this semester.

**Semester 6**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3060</td>
<td>0.50</td>
<td>Populations, Communities &amp; Ecosystems</td>
</tr>
<tr>
<td>ZOO*3050</td>
<td>0.50</td>
<td>Developmental Biology</td>
</tr>
<tr>
<td>ZOO*3620</td>
<td>0.50</td>
<td>Comparative Animal Physiology II</td>
</tr>
<tr>
<td>ZOO*3630</td>
<td>0.25</td>
<td>Lab Studies in Animal Physiology II</td>
</tr>
</tbody>
</table>

Electives or restricted electives to a maximum of 2.75 total credits in this semester.

**Semester 7**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOO*4070</td>
<td>0.50</td>
<td>Animal Behaviour</td>
</tr>
<tr>
<td>ZOO*4910</td>
<td>0.50</td>
<td>Integrative Vertebrate Biology</td>
</tr>
</tbody>
</table>

1.50 electives or restricted electives

**Semester 8**

2.50 electives or restricted electives

* CIS*1200 is recommended for those needing to improve their computer skills.

**Restricted Electives must include:**

1. A minimum of 1.00 credits of Liberal Education electives is required. The list of Liberal Education electives for B.Sc. students can be found at: [https://www.uoguelph.ca/bsc/](https://www.uoguelph.ca/bsc/)

2. A minimum of 0.50 credits from:
   - ZOO*4330 [0.50] Biology of Fishes
   - ZOO*4920 [0.25] Lab Studies in Ornithology
   - ZOO*4940 [0.25] Lab Studies in Herpetology
   - ZOO*4950 [0.25] Lab Studies in Mammalogy

3. A minimum of 0.50 credits from:
   - BIOL*4410 [0.75] Field Ecology
   - BIOL*4610 [0.75] Arctic Ecology
   - BIOL*4700 [0.50] Field Biology
   - BIOL*4710 [0.25] Field Biology
   - BIOL*4800 [0.50] Field Biology
   - BIOL*4810 [0.25] Field Biology
   - IBIO*4500 [1.00] Research in Integrative Biology I
   - IBIO*4510 [1.00] Research in Integrative Biology II
   - IBIO*4521/2 [2.00] Thesis in Integrative Biology
   - ZOO*4170 [0.50] Experimental Comparative Animal Physiology
   - ZOO*4300 [0.75] Marine Biology and Oceanography

Other field or research courses with approval of faculty advisor.

**Credit Summary (20.00 Total Credits)**

- 4.00 - First year science core
- 8.00 - Required science courses semesters 3 - 8
- 1.00 - Restricted electives (# 2, and 3 in restricted electives list)
- 3.00 - Approved Science electives
- 1.00 - Liberal Education electives (#1 in restricted electives)
- 3.00 - Free electives - any approved elective for B.Sc. students

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.

**Minor (Honours Program)**

Students in majors other than Zoology, Biodiversity, Wildlife Biology & Conservation and Marine & Freshwater Biology who have a strong interest in Zoology may choose to take a minor in Zoology.

A minor in Zoology requires a minimum of 5.00 credits, 4.00 of which must be from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2060</td>
<td>0.50</td>
<td>Ecology</td>
</tr>
<tr>
<td>BIOL*2400</td>
<td>0.50</td>
<td>Evolution</td>
</tr>
<tr>
<td>BIOL*3060</td>
<td>0.50</td>
<td>Populations, Communities &amp; Ecosystems</td>
</tr>
</tbody>
</table>

2019-2020 Undergraduate Calendar
Bachelor of Science in Agriculture [B.Sc.(Agr.)]
The B.Sc.(Agr.) degree program is a 4 year honours science program designed to provide a fundamental education in the science of agriculture. The curriculum includes courses in the agricultural sciences, the physical, biological and social sciences, and in the arts.

Program Information
Agricultural scientists must be effective communicators and problem solvers, self-directed in their learning, and have a global perspective of the agrifood systems. Students will be involved in co-operative group learning activities and will experience courses that are multidisciplinary and integrate the teaching activities of many faculty and departments.

Students will have the option of completing a broad agricultural program (honours agricultural science) or another major in which they take courses towards a more focused subject area. The curriculum provides opportunities for students to select courses that will help them prepare for professional careers as entrepreneurs, scientists, marketing specialists, financial managers, technical advisors, or communication specialists. Students will have a comprehensive understanding of the food system when they graduate. They will be able to integrate their knowledge of production agriculture, environmental management, resource allocation and business management as it applies to the food system nationally and globally.

Students will be encouraged to integrate their academic program with a well-planned series of employment activities in the summer months and to develop their leadership and interpersonal skills in on-campus and community activities.

Graduates meet the educational requirements for membership in the Ontario Institute of Agrologists. The Ontario Institute of Agrologists is the professional organization in agriculture in the Province of Ontario. Professional institutes in the various provinces in Canada and the scientific societies in agriculture collectively comprise the Agricultural Institute of Canada. The program received full accreditation from the Agricultural Institute of Canada in April 2007.

B.Sc.(Agr.) Majors:
- Animal Science
- Crop, Horticulture and Turfgrass Science
- Honours Agricultural Science

Declaration of a Major
All students are admitted into an undeclared major upon entry. Students will be required to select a major by semester 3 through consultation with the Program Counsellor and Faculty Advisors. The course requirements are listed for each major in the following section.

Students may, with appropriate approvals, elect to complete Minors associated with another degree programs as listed in the undergraduate calendar.

Honours Minor
A minor is a group of courses which provides for exposure to and mastery of the fundamental principles of a subject. A minor consists of a minimum of 5.00 credits (normally 10 courses). It may also require certain other courses from other areas to be taken along with the specified courses of the minor. A minor is taken in conjunction with a major.

A maximum of 2.50 credits required in a major program may be applied to meet the requirements of a minor.

Students should seek advice from the B.Sc.(Agr.) Program Counsellor about the addition of a minor. Students in the B.Sc.(Agr.) are not eligible for a minor in Agriculture.

Study Abroad
The B.Sc.(Agr.) degree program is similar in many respects to programs offered at faculties of agricultural science in other provinces in Canada. Students are strongly encouraged to consider studying for 1 or 2 semesters in other faculties of agricultural science in Canada and in selected countries around the world.

Students interested in studying at another institution should consult the B.Sc.(Agr.) Program Counsellor to discuss their plans, and refer to the scholarship section for financial support.

For more specific information on these opportunities refer to Section V--International Study in this calendar, or contact the OAC Dean's Office.

Doctor of Veterinary Medicine
Students in the B.Sc.(Agr.) program may apply for admission to the D.V.M. program after semester 4 or later. Applications must be submitted to the Admissions Services, Office of Registrarial Services. Students should consult the D.V.M. Section of the calendar.

Students who do not gain admission to the D.V.M. program are eligible to continue in the B.Sc.(Agr.) program through to graduation.

Students planning to enter the D.V.M. program are advised to include 12U biology, 12U chemistry, and 12U physics in addition to calculus in secondary school.

Continuation of Study
Students are advised to consult the regulations for continuation of study within the program which are outlined in detail in Section VIII--Undergraduate Degree Regulations & Procedures.

Conditions of Graduation
To qualify for the degree Bachelor of Science (Agriculture), the student must successfully complete a minimum of 20.00 credits as set out in the Schedule of Studies listed below. In addition, students must meet the continuation of study requirements at the time of graduation and have a minimum of 60% cumulative average.

Honours Agriculture (AGRS)

The Honours Agriculture major combines a core curriculum of agricultural science courses with a wide range of electives focusing on agri-food business, animal and plant production, land stewardship and sustainability. This major allows students to create a curriculum uniquely tailored to their career goals and provides diverse opportunities to explore international agriculture and leading edge agricultural research in animal production, plant biotechnology and pest management. The flexibility provided in semesters 5 and 6 permits students to participate in international exchanges and semesters abroad. Students can also incorporate a variety of field trips, experiential learning in the workplace and independent study into their program of studies. The combination of a solid understanding of life science and current agricultural practice with specialized skills and experience provided by this program is greatly valued by prospective employers in this essential sector of Canada’s economy.

Semester 1
- AGR*1110 [1.00] Introduction to the Agri-Food Systems
- BIOL*1050 [0.50] Biology of Plants & Animals in Managed Ecosystems
- CHEM*1040 [0.50] General Chemistry I
- MATH*1080 [0.50] Elements of Calculus I

Semester 2
- AGR*2050 [0.50] Agroecology
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1050 [0.50] General Chemistry II
- FARE*1400 [1.00] Economics of the Agri-Food System

Semester 3
- AGR*2320 [0.50] Soils in Agroecosystems
- AGR*2350 [0.50] Animal Production Systems, Health and Industry
- AGR*2470 [0.50] Introduction to Plant Agriculture
- FARE*2700 [0.50] Survey of Natural Resource Economics
- MBG*2400 [0.50] Fundamentals of Plant and Animal Genetics

Semester 4
- ANSC*2340 [0.50] Structure of Farm Animals
- ENVS*2040 [0.50] Plant Health and the Environment
- STAT*2040 [0.50] Statistics I
- 1.00 electives or restricted electives

Semester 5 to 8
Students must choose either Option A (Production and Management) or B (Research).

Option A - Production and Management

Semester 5
- FOOD*3090 [0.50] Food Science and Human Nutrition
- 2.00 electives or restricted electives

Semester 6
- 2.50 electives or restricted electives

Semester 7
- 2.50 electives or restricted electives

Semester 8
- AGR*4600 [1.00] Agriculture and Food Issues Problem Solving
- 1.50 electives or restricted electives

Restricted Electives - Option A
Students should note that some restricted electives require other courses not included among the required courses for the major as prerequisites. Students should consult the most recent undergraduate calendar for specific requirements.

- A minimum of 1.00 credits from the list of restricted electives below:
  - AGR*2500 [0.50] Field Course in International Agriculture
  - AGR*3010 [0.50] Special Studies in Agricultural Science I
  - AGR*3450 [0.50] Research Methods in Agricultural Science
  - AGR*3500 [0.50] Experiential Education I
  - ANSC*4010 [0.50] Animal Welfare Judging and Evaluation
  - ANSC*4230 [0.50] Challenges and Opportunities in Dairy Cattle Production
  - ANSC*4610 [0.50] Critical Analysis in Animal Science
  - CROP*2460 [0.50] Crop Science Field Trip
  - EDRD*2020 [0.50] Interpersonal Communication
  - EDRD*3050 [0.50] Agricultural Communication I
  - EDRD*3140 [0.50] Organizational Communication
  - FARE*3310 [0.50] Operations Management

Last Revision: July 4, 2019
A humanities or social science course (0.50 credits) at the 1000-level or above. See Grain Crops

A minimum of 2.00 credits from the following lists:

Research Methods in Agricultural Science
Principles and Applications of Plant Propagation
Food Science and Human Nutrition
Introduction to Turfgrass Science
Plant Tissue Culture
Intermediate Microeconomics

A minimum of 0.50 credits from the following list:

CROP*4240 [0.50] Weed Science
ENVS*3020 [0.50] Pesticides and the Environment
ENVS*3210 [0.50] Plant Pathology
ENVS*3230 [0.50] Agroforestry Systems

A minimum of 0.50 credits from the following list:

ACCT*1220 [0.50] Introductory Financial Accounting
ECON*1050 [0.50] Introductory Microeconomics
ECON*1100 [0.50] Introductory Macroeconomics
ECON*2310 [0.50] Intermediate Microeconomics
FARE*2410 [0.50] Agrifood Markets and Policy
FRED*3170 [0.50] Cost-Benefit Analysis

Students may also take any of the following courses as restricted electives:
BIOS*2580 [0.50] Introduction to Biochemistry
BOT*2100 [0.50] Life Strategies of Plants
MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
MBG*3060 [0.50] Quantitative Genetics
OAGR*2070 [1.00] Introduction to Organic Agriculture

A minimum of 7.00 credits must be at the 3000 level or higher, of which 5.00 credits must be in agricultural science and of which 3.50 credits must be at the 4000 level. Refer to Program Counsellor for list of agricultural science courses.

A minimum of 0.50 credits from the following list:

Horticultural Science:
Animal Science:
Environmental Biology:
Horticultural Science:
Resource Management:

Major (Honours Program)

The requirement of 5.00 credits for the minor is divided into three groups of courses: required courses and two lists of restricted electives. Students should ensure that they obtain the necessary prerequisites for required and restricted elective courses. Students should seek academic counselling from the B.Sc.(Agr) Program Counsellor early in their program. This minor is not open to students in the B.Sc.(Agr) Program.

Minor

A minimum of 5.00 credits is required including:

AGR*1110 [1.00] Introduction to the Agri-Food Systems

1.50 credits from the following Restricted Elective list:

AGR*2050 [0.50] Agroecology
AGR*2320 [0.50] Soils in Agroecosystems
AGR*2350 [0.50] Animal Production Systems, Health and Industry
AGR*2470 [0.50] Introduction to Plant Agriculture
AGR*2500 [0.50] Field Course in International Agriculture
EDRD*3400 [0.50] Sustainable Communities
FARE*1400 [1.00] Economics of the Agri-Food System
FOOD*3090 [0.50] Food Science and Human Nutrition

2.50 credits from the following Restricted Elective list, without regard to group:

Note: At least 0.50 credits from the following list must be at the 4000 level and 1.00 credits at the 3000 level or higher.

Agronomy:

Crop*3300 [0.50] Grain Crops
Crop*3310 [0.50] Protein and Oilseed Crops
Crop*3340 [0.50] Managed Grasslands
Crop*4220 [0.50] Cropping Systems
Crop*4240 [0.50] Weed Science
Hort*4380 [0.50] Tropical and Sub-Tropical Crops
PBI*3110 [0.50] Crop Physiology

Environmental Biology:

ENVS*2040 [0.50] Plant Health and the Environment
ENVS*3020 [0.50] Pesticides and the Environment
ENVS*3040 [0.50] Natural Chemicals in the Environment
ENVS*3210 [0.50] Plant Pathology
ENVS*4100 [0.50] Integrated Management of Invasive Insect Pests

Horticultural Science:

Hort*3150 [0.50] Principles and Applications of Plant Propagation
Hort*3280 [0.50] Greenhouse Production
Hort*4300 [0.50] Postharvest Physiology
PBI*3110 [0.50] Crop Physiology
PBI*3750 [0.50] Plant Tissue Culture

Resource Management:

ENVS*2120 [0.50] Introduction to Environmental Stewardship
ENVS*2030 [0.50] Meteorology and Climatology
ENVS*3050 [0.50] Microclimatology
ENVS*3080 [0.50] Soil and Water Conservation
ENVS*4090 [0.50] Soil Management
ENVS*4160 [0.50] Soil and Nutrient Management
Students may also count the following courses as restricted electives:

**Animal Science (ANSC)**

Department of Animal Biosciences, Ontario Agricultural College

The animal science curriculum is designed to provide a broad opportunity to study animal physiology, nutrition, genetics, behaviour and welfare across a range of large and small domestic animal species. The program is designed around an option to follow a Production and Management focus or a Research focus in semesters 5-8 with additional flexibility to allow for a semester of study abroad.

**Semester 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR*1110</td>
<td>1.00</td>
<td>Introduction to the Agri-Food Systems</td>
</tr>
<tr>
<td>BIOL*1050</td>
<td>0.50</td>
<td>Biology of Plants &amp; Animals in Managed Ecosystems</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>0.50</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>0.50</td>
<td>Elements of Calculus I</td>
</tr>
</tbody>
</table>

**Semester 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR*2050</td>
<td>0.50</td>
<td>Agroecology</td>
</tr>
<tr>
<td>BIOL*1090</td>
<td>0.50</td>
<td>Introduction to Molecular and Cellular Biology</td>
</tr>
<tr>
<td>CHEM*2050</td>
<td>0.50</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>FARE*1400</td>
<td>1.00</td>
<td>Economics of the Agri-Food System</td>
</tr>
</tbody>
</table>

**Semester 3**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR*2320</td>
<td>0.50</td>
<td>Soils in Agroecosystems</td>
</tr>
<tr>
<td>AGR*2350</td>
<td>0.50</td>
<td>Animal Production Systems, Health and Industry</td>
</tr>
<tr>
<td>AGR*2470</td>
<td>0.50</td>
<td>Introduction to Plant Agriculture</td>
</tr>
<tr>
<td>MBG*2400</td>
<td>0.50</td>
<td>Fundamentals of Plant and Animal Genetics</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FARE*2700</td>
<td>0.50</td>
<td>Survey of Natural Resource Economics</td>
</tr>
<tr>
<td>MBG*2040</td>
<td>0.50</td>
<td>Foundations in Molecular Biology and Genetics</td>
</tr>
</tbody>
</table>

**Semester 4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*1210</td>
<td>1.00</td>
<td>Principles of Animal Care and Welfare</td>
</tr>
<tr>
<td>ANSC*2340</td>
<td>0.50</td>
<td>Structure of Farm Animals</td>
</tr>
<tr>
<td>BIOC*2580</td>
<td>0.50</td>
<td>Introduction to Biochemistry</td>
</tr>
<tr>
<td>STAT*2040</td>
<td>0.50</td>
<td>Statistics I</td>
</tr>
</tbody>
</table>

**Semester 5 to 8**

Students must choose either Option A (Production and Management) or B (Research).

**Option A - Production and Management**

**Semester 5**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*3080</td>
<td>0.50</td>
<td>Agricultural Animal Physiology</td>
</tr>
<tr>
<td>ANSC*3120</td>
<td>0.50</td>
<td>Introduction to Animal Nutrition</td>
</tr>
<tr>
<td>NUTR*3210</td>
<td>0.50</td>
<td>Fundamentals of Nutrition</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

**Semester 6**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*3040</td>
<td>0.50</td>
<td>Animal Reproduction</td>
</tr>
<tr>
<td>ANSC*3270</td>
<td>0.50</td>
<td>Animal Disorders</td>
</tr>
<tr>
<td>MBG*3060</td>
<td>0.50</td>
<td>Quantitative Genetics</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

**Semester 7**

2.50 electives or restricted electives

**Semester 8**

2.50 electives or restricted electives

**Restricted Electives - Option A**

Students should note that some restricted electives require other courses not included among the required courses for the major as prerequisites. Students should consult the most recent undergraduate calendar for specific requirements.

1. A minimum of 1.00 credits from the list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR*2500</td>
<td>0.50</td>
<td>Field Course in International Agriculture</td>
</tr>
<tr>
<td>AGR*3010</td>
<td>0.50</td>
<td>Special Studies in Agricultural Science I</td>
</tr>
<tr>
<td>AGR*3450</td>
<td>0.50</td>
<td>Research Methods in Agricultural Science</td>
</tr>
<tr>
<td>AGR*3500</td>
<td>0.50</td>
<td>Experiential Education I</td>
</tr>
<tr>
<td>ANSC*4010</td>
<td>0.50</td>
<td>Animal Welfare Judging and Evaluation</td>
</tr>
<tr>
<td>ANSC*4230</td>
<td>0.50</td>
<td>Challenges and Opportunities in Dairy Cattle Production</td>
</tr>
<tr>
<td>ANSC*4610</td>
<td>0.50</td>
<td>Critical Analysis in Animal Science</td>
</tr>
<tr>
<td>CROP*4260</td>
<td>0.50</td>
<td>Crop Science Field Trial</td>
</tr>
<tr>
<td>EDRD*7020</td>
<td>0.50</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>EDRD*3605</td>
<td>0.50</td>
<td>Agricultural Communication I</td>
</tr>
<tr>
<td>EDRD*3610</td>
<td>0.50</td>
<td>Organizational Communication</td>
</tr>
<tr>
<td>FARE*3310</td>
<td>0.50</td>
<td>Operations Management</td>
</tr>
<tr>
<td>FARE*4220</td>
<td>0.50</td>
<td>Advanced Agribusiness Management</td>
</tr>
<tr>
<td>FARE*4310</td>
<td>0.50</td>
<td>Resource Economics</td>
</tr>
</tbody>
</table>

2. A minimum of 3.00 credits is required from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*4050</td>
<td>0.50</td>
<td>Biotechnology in Animal Science</td>
</tr>
<tr>
<td>MBG*4020</td>
<td>0.50</td>
<td>Genetics of Companion Animals</td>
</tr>
<tr>
<td>MBG*4030</td>
<td>0.50</td>
<td>Animal Breeding Methods and Applications</td>
</tr>
</tbody>
</table>

A minimum of 1.00 credits from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*3170</td>
<td>0.50</td>
<td>Nutrition of Fish and Crustacea</td>
</tr>
<tr>
<td>ANSC*3180</td>
<td>0.50</td>
<td>Wildlife Nutrition</td>
</tr>
<tr>
<td>ANSC*3260</td>
<td>0.50</td>
<td>Beef Cattle Nutrition</td>
</tr>
<tr>
<td>ANSC*4270</td>
<td>0.50</td>
<td>Dairy Cattle Nutrition</td>
</tr>
<tr>
<td>ANSC*4280</td>
<td>0.50</td>
<td>Poultry Nutrition</td>
</tr>
<tr>
<td>ANSC*4290</td>
<td>0.50</td>
<td>Swine Nutrition</td>
</tr>
<tr>
<td>ANSC*4470</td>
<td>0.50</td>
<td>Animal Metabolism</td>
</tr>
<tr>
<td>ANSC*4560</td>
<td>0.50</td>
<td>Pet Nutrition</td>
</tr>
<tr>
<td>EQN*4020</td>
<td>0.50</td>
<td>Advanced Equine Nutrition</td>
</tr>
</tbody>
</table>

A minimum of 1.00 credits from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*3090</td>
<td>0.50</td>
<td>Vertebrate Ethology</td>
</tr>
<tr>
<td>ANSC*4090</td>
<td>0.50</td>
<td>Applied Animal Behaviour</td>
</tr>
<tr>
<td>ANSC*4100</td>
<td>0.50</td>
<td>Applied Environmental Physiology and Animal Housing</td>
</tr>
<tr>
<td>ANSC*4490</td>
<td>0.50</td>
<td>Applied Endocrinology</td>
</tr>
<tr>
<td>ANSC*4650</td>
<td>0.50</td>
<td>Comparative Immunology</td>
</tr>
<tr>
<td>EQN*3050</td>
<td>0.50</td>
<td>Equine Exercise Physiology</td>
</tr>
</tbody>
</table>

3. A minimum of 7.00 credits must be at the 3000 level or higher, of which 5.00 credits must be in agricultural science and of which 3.50 credits must be at the 4000 level.

Refer to Program Counsellor for list of agricultural science courses.

4. A humanities or social science courses (0.50 credits) at the 1000-level or above. See Program Counsellor for acceptable list of courses.

**Option B - Research**

**Semester 5**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR*3450</td>
<td>0.50</td>
<td>Research Methods in Agricultural Science</td>
</tr>
<tr>
<td>ANSC*3080</td>
<td>0.50</td>
<td>Agricultural Animal Physiology</td>
</tr>
<tr>
<td>ANSC*3120</td>
<td>0.50</td>
<td>Introduction to Animal Nutrition</td>
</tr>
<tr>
<td>NUTR*3210</td>
<td>0.50</td>
<td>Fundamentals of Nutrition</td>
</tr>
</tbody>
</table>

0.50 electives or restricted electives

**Semester 6**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*3040</td>
<td>0.50</td>
<td>Animal Reproduction</td>
</tr>
<tr>
<td>ANSC*3270</td>
<td>0.50</td>
<td>Animal Disorders</td>
</tr>
<tr>
<td>MBG*3060</td>
<td>0.50</td>
<td>Quantitative Genetics</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

**Semester 7**

2.50 electives or restricted electives

**Semester 8**

2.50 electives or restricted electives

**Restricted Electives - Option B**

Students should note that some restricted electives require other courses not included among the required courses for the major as prerequisites. Students should consult the most recent undergraduate calendar for specific requirements.

1. A minimum of 1.00 credits from the following list (normally to be taken during semesters 7 and 8):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*4350</td>
<td>0.50</td>
<td>Experiments in Animal Biology</td>
</tr>
<tr>
<td>ANSC*4610</td>
<td>0.50</td>
<td>Critical Analysis in Animal Science</td>
</tr>
<tr>
<td>ANSC*4700</td>
<td>0.50</td>
<td>Research in Animal Biology I</td>
</tr>
<tr>
<td>ANSC*4710</td>
<td>0.50</td>
<td>Research in Animal Biology II</td>
</tr>
</tbody>
</table>

2. A minimum of 3.00 credits is required from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*4050</td>
<td>0.50</td>
<td>Biotechnology in Animal Science</td>
</tr>
<tr>
<td>MBG*4020</td>
<td>0.50</td>
<td>Genetics of Companion Animals</td>
</tr>
<tr>
<td>MBG*4030</td>
<td>0.50</td>
<td>Animal Breeding Methods and Applications</td>
</tr>
</tbody>
</table>

A minimum of 1.00 credits from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*3170</td>
<td>0.50</td>
<td>Nutrition of Fish and Crustacea</td>
</tr>
<tr>
<td>ANSC*3180</td>
<td>0.50</td>
<td>Wildlife Nutrition</td>
</tr>
<tr>
<td>ANSC*3260</td>
<td>0.50</td>
<td>Beef Cattle Nutrition</td>
</tr>
<tr>
<td>ANSC*4270</td>
<td>0.50</td>
<td>Dairy Cattle Nutrition</td>
</tr>
<tr>
<td>ANSC*4280</td>
<td>0.50</td>
<td>Poultry Nutrition</td>
</tr>
<tr>
<td>ANSC*4290</td>
<td>0.50</td>
<td>Swine Nutrition</td>
</tr>
<tr>
<td>ANSC*4470</td>
<td>0.50</td>
<td>Animal Metabolism</td>
</tr>
<tr>
<td>ANSC*4560</td>
<td>0.50</td>
<td>Pet Nutrition</td>
</tr>
<tr>
<td>EQN*4020</td>
<td>0.50</td>
<td>Advanced Equine Nutrition</td>
</tr>
</tbody>
</table>

A minimum of 1.00 credits from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*3090</td>
<td>0.50</td>
<td>Vertebrate Ethology</td>
</tr>
<tr>
<td>ANSC*4090</td>
<td>0.50</td>
<td>Applied Animal Behaviour</td>
</tr>
</tbody>
</table>
Crop, Horticulture and Turfgrass Sciences (CHAT)

Department of Plant Agriculture, Ontario Agricultural College

The Crop, Horticultural and Turfgrass Sciences major is for students who want to apply the latest advancements in the biological sciences to contemporary problems in the plant production industries. This major is appropriate for students with a focus on the production of field crops for food, fuel or biomaterials, management of today’s advanced commercial greenhouses, horticultural production, breeding improved crop varieties, or using turfgrass and other plant species to enhance urban environments. The flexibility provided in semester 6 permits students to participate in international exchanges and semesters abroad. Students can also incorporate a variety of field trips, experiential learning in the workplace and independent study into their program of studies.

Semester 1

AGR*1110 [1.00] Introduction to the Agri-Food Systems
BIOL*1050 [0.50] Biology of Plants & Animals in Managed Ecosystems
CHEM*1040 [0.50] General Chemistry I
MATH*1080 [0.50] Elements of Calculus I

Semester 2

AGR*2050 [0.50] Agroecology
BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
CHEM*1050 [0.50] General Chemistry II
FAR*1140 [1.00] Economics of the Agri-Food System

Semester 3

AGR*2320 [0.50] Soils in Agroecosystems
AGR*2350 [0.50] Animal Production Systems, Health and Industry
AGR*2470 [0.50] Introduction to Plant Agriculture
FAR*2700 [0.50] Survey of Natural Resource Economics
MBG*2400 [0.50] Fundamentals of Plant and Animal Genetics

Semester 4

BIOC*2580 [0.50] Introduction to Biochemistry
BOT*2100 [0.50] Life Strategies of Plants
ENV*2040 [0.50] Plant Health and the Environment
STAT*2040 [0.50] Statistics I
0.50 electives or restricted electives

Note: Students who wish to add business courses to their program are advised to take ACCT*1220 in semester 4 and ACCT*2230 in semester 5.

Semester 5 to 8

Students must choose either Option A (Production and Management) or B (Research).

Option A - Production and Management

Semester 5

FOOD*3090 [0.50] Food Science and Human Nutrition
2.00 electives or restricted electives

Semester 6

PBIO*3110 [0.50] Crop Physiology
2.00 electives or restricted electives

Semester 7

One of:
ENV*4090 [0.50] Soil Management
ENV*4160 [0.50] Soil and Nutrient Management
2.00 electives or restricted electives

Semester 8

AGR*4600 [1.00] Agriculture and Food Issues Problem Solving
1.50 electives or restricted electives

Restricted Electives - Option A

Students should note that some restricted electives require other courses not included among the required courses for the major as prerequisites. Students should consult the most recent undergraduate calendar for specific requirements.

1. A minimum of 1.00 credits from the following list:

- AGR*3010 [0.50] Special Studies in Agricultural Science I
- AGR*3450 [0.50] Research Methods in Agricultural Science
- AGR*3500 [0.50] Experiential Education I

Crop Science:

- AGR*2500 [0.50] Field Course in International Agriculture
- CROP*3300 [0.50] Grain Crops
- CROP*3310 [0.50] Protein and Oilseed Crops
- CROP*3340 [0.50] Managed Grasslands
- CROP*4220 [0.50] Cropping Systems
- CROP*4240 [0.50] Weed Science
- ENV*3080 [0.50] Soil and Water Conservation
- ENV*3210 [0.50] Plant Pathology
- ENV*4100 [0.50] Integrated Management of Invasive Insect Pests
- HORT*4380 [0.50] Tropical and Sub-Tropical Crops
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- MBG*3100 [0.50] Plant Genetics
- MBG*4160 [0.50] Plant Breeding
- OAGR*2070 [1.00] Introduction to Organic Agriculture
- OAGR*4050 [1.00] Design of Organic Production Systems
- PBIO*3750 [0.50] Plant Tissue Culture
- PBIO*4070 [0.50] Biological and Cultural Control of Plant Diseases
- PBIO*4750 [0.50] Genetic Engineering of Plants

Horticultural Science:

- CROP*4240 [0.50] Weed Science
- ENV*3210 [0.50] Plant Pathology
- ENV*4100 [0.50] Integrated Management of Invasive Insect Pests
- HORT*2450 [0.50] Introduction to Turfgrass Science
- HORT*3010 [0.50] Annual, Perennial and Indoor Plants - Identification and Use
- HORT*3150 [0.50] Principles and Applications of Plant Propagation
- HORT*3270 [0.50] Medicinal Plants
- HORT*3280 [0.50] Greenhouse Production
- HORT*3310 [0.50] Plants, Food and Health
- HORT*3510 [0.50] Vegetable Production
- HORT*4300 [0.50] Postharvest Physiology
- HORT*4420 [0.50] Fruit Crops
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- MBG*3100 [0.50] Plant Genetics
- MBG*4160 [0.50] Plant Breeding
- PBIO*3750 [0.50] Plant Tissue Culture
- PBIO*4070 [0.50] Biological and Cultural Control of Plant Diseases
- PBIO*4750 [0.50] Genetic Engineering of Plants

Turfgrass Science:

- CROP*4240 [0.50] Weed Science
- ENV*3020 [0.50] Pesticides and the Environment
- ENV*3140 [0.50] Management of Turfgrass Diseases
- HORT*2450 [0.50] Introduction to Turfgrass Science
- HORT*3050 [0.50] Management of Turfgrass Insect Pests and Weeds
- HORT*4200 [0.50] Plants, the Environment and Society
- HORT*4450 [0.50] Advanced Turfgrass Science

2. A minimum of 7.00 credits must be at the 3000 level or higher, of which 5.00 credits must be in agriculture science and of which 3.50 credits must be at the 4000 level.

Option B - Research

Semester 5

AGR*3450 [0.50] Research Methods in Agricultural Science
FOOD*3090 [0.50] Food Science and Human Nutrition
1.50 electives or restricted electives

Semester 6

PBIO*3110 [0.50] Crop Physiology
2.00 electives or restricted electives

Semester 7

AGR*4450 [1.00] Research Project I
One of:
ENV*4090 [0.50] Soil Management
ENV*4160 [0.50] Soil and Nutrient Management
1.00 electives or restricted electives

Semester 8

AGR*4460 [1.00] Research Project II

1.50 electives or restricted electives

Restricted Electives - Option B

Students should note that some restricted electives require other courses not included among the required courses for the major as prerequisites. Students should consult the most recent undergraduate calendar for specific requirements.

1. During semesters 4-8 students must select a minimum of 3.00 credits from the lists of restricted electives below, without regard to group. Courses are organized into three subject areas only to provide guidance to students who wish to concentrate in a particular area of plant agriculture.

**Crop Science:**

- AGR*2500 [0.50] Field Course in International Agriculture
- CROP*3300 [0.50] Grain Crops
- CROP*3310 [0.50] Protein and Oilseed Crops
- CROP*3340 [0.50] Managed Grasslands
- CROP*4220 [0.50] Cropping Systems
- CROP*4240 [0.50] Weed Science
- ENVS*3080 [0.50] Soil and Water Conservation
- ENVS*3210 [0.50] Plant Pathology
- ENVS*4100 [0.50] Integrated Management of Invasive Insect Pests
- HORT*4380 [0.50] Tropical and Sub-Tropical Crops
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- MBG*3100 [0.50] Plant Genetics
- MBG*4160 [0.50] Plant Breeding
- OAGR*2070 [1.00] Introduction to Organic Agriculture
- OAGR*4050 [1.00] Design of Organic Production Systems
- PBIO*3750 [0.50] Plant Tissue Culture
- PBIO*4070 [0.50] Biological and Cultural Control of Plant Diseases
- PBIO*4750 [0.50] Genetic Engineering of Plants

**Horticultural Science:**

- CROP*4240 [0.50] Weed Science
- ENVS*3210 [0.50] Plant Pathology
- ENVS*4100 [0.50] Integrated Management of Invasive Insect Pests
- HORT*2450 [0.50] Introduction to Turfgrass Science
- HORT*3010 [0.50] Annual, Perennial and Indoor Plants - Identification and Use
- HORT*3150 [0.50] Principles and Applications of Plant Propagation
- HORT*3270 [0.50] Medicinal Plants
- HORT*3280 [0.50] Greenhouse Production
- HORT*3310 [0.50] Plants, Food and Health
- HORT*3510 [0.50] Vegetable Production
- HORT*4300 [0.50] Postharvest Physiology
- HORT*4420 [0.50] Fruit Crops
- MBG*2040 [0.50] Foundations in Molecular Biology and Genetics
- MBG*3100 [0.50] Plant Genetics
- MBG*4160 [0.50] Plant Breeding
- PBIO*3750 [0.50] Plant Tissue Culture
- PBIO*4070 [0.50] Biological and Cultural Control of Plant Diseases
- PBIO*4750 [0.50] Genetic Engineering of Plants

**Turfgrass Science:**

- CROP*4240 [0.50] Weed Science
- ENVS*3020 [0.50] Pesticides and the Environment
- ENVS*3140 [0.50] Management of Turfgrass Diseases
- HORT*2450 [0.50] Introduction to Turfgrass Science
- HORT*3050 [0.50] Management of Turfgrass Insect Pests and Weeds
- HORT*4200 [0.50] Plants, the Environment and Society
- HORT*4450 [0.50] Advanced Turfgrass Science

2. A minimum of 7.00 credits must be at the 3000 level or higher, of which 5.00 credits must be in agricultural science and of which 3.50 credits must be at the 4000 level. Refer to the Program Counsellor for the list of agricultural science courses.

3. A humanities or social science courses (0.50 credits) at the 1000-level or above from the College of Arts or College of Social and Applied Human Sciences. See Program Counsellor for acceptable list of courses.

**Business Electives:**

Students in either Option A or Option B who wish to add business courses to their program are advised to select courses from the following list:

- FARE*3310 [0.50] Operations Management
- FARE*4220 [0.50] Advanced Agribusiness Management
- FARE*4240 [0.50] Futures and Options Markets
- FARE*4370 [0.50] Food & Agri Marketing Management
- MGMT*3320 [0.50] Financial Management
Bachelor of Science in Environmental Sciences
[B.Sc.(Env.)]

Program Information

Objectives of the Program

The Environmental Sciences program is designed to provide a strong interdisciplinary grounding in specific environmental sciences including the socioeconomic context in which environmental issues are resolved. There is an emphasis on management and decision-making skills for the application of scientific knowledge to environmental problems, and the evaluation of appropriate environmental policies. A practical perspective based on defining and resolving problems is central to the program, and this is often done in the context of group work. Substantial emphasis is placed on communication skills, including the development of competence in both written and oral presentations. These skills will be progressively developed in core courses from the first to the fourth year. Students in the final year of their program will be expected to take part in more intensive communication skill development. Graduates will seek employment in a range of fields, from government agencies to private industry and research.

Academic Counselling

General information on the degree program is available from the Program Counsellor. Advising for each major is available through the assigned faculty advisor responsible for the major. Students are encouraged to seek the advice of the faculty advisors when choosing restricted electives and planning course selections.

Degree

The degree granted for the successful completion of this honours program will be the Bachelor of Science in Environmental Sciences—B.Sc.(Env.).

Continuation of Study

Students are advised to consult the regulations for Continuation of Study in Section VIII—Undergraduate Degree Regulations and Procedures of this Calendar.

Conditions for Graduation

In order to graduate from the B.Sc.(Env.) program, students must successfully complete a minimum of 20.00 credits including all the stated course requirements for the program. As well, students must achieve a cumulative average of 60% or higher over all course attempts.

Environmental Sciences (Co-op)

A 5-year Honours Program in Environmental Sciences is offered as a Co-operative Education Program. This option is offered within the B.Sc. (Env.) degree and is available to all majors. The course requirements are the same as those listed for the regular B.Sc. (Env.) program, by the Co-operative Education Program and as outlined in the Continuation of Study policy (Section VIII—Undergraduate Degree Regulations & Procedures). 3 co-op work terms (COOP*1000, COOP*2000, COOP*3000) are required. An optional 4th co-op work term (COOP*4000) is available. COOP*1100 must be completed during semester 2.

Environmental Sciences Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Term 1</td>
<td>Academic Term 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Term 3</td>
<td>COOP*1000</td>
<td>Academic Term 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000</td>
<td>Academic Term 5</td>
<td>COOP*3000</td>
</tr>
<tr>
<td>4</td>
<td>Academic Term 6</td>
<td>Academic Term 7</td>
<td>COOP*4000</td>
</tr>
<tr>
<td>5</td>
<td>Academic Term 8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Since some of the course requirements in the degree program (core or major) are not offered each semester, careful planning and program consultation with the Faculty Co-op Advisor is essential. In particular, students are encouraged to seek advice when choosing for their Summer academic semester.

The Environmental Sciences Program

The degree in Environmental Sciences consists of a minimum of 20.00 credits, as follows:

1. 7.00 Environmental Sciences Core
2. 8.50 - 11.00 Environmental Sciences prescribed and restricted electives according to major.
3. free electives*

Within these courses, students must include at least 6.00 credits at the 3000 or 4000 level, and no program may include more than 7.00 credits at the 1000 level.

* There are not specific subject requirements for the elective courses, however, you may NOT select the following: BIOL*1500, BOT*1200, CHEM*1100, CIS*1000, ENVS*1060, GEOL*1100, MIRC*1020, MBG*1000, PHYS*1600.

Please note that not all courses in the "One of:" options are available each semester (F, W, S). Students are encouraged to seek advice from the appropriate advisor when selecting and scheduling courses.

First Year Curriculum

The first year courses have been selected to provide students with sufficient background and knowledge to enter any one of the Environmental Sciences majors.

Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1070</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>0.50</td>
</tr>
<tr>
<td>ECON*1030</td>
<td>1.00</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Semester 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1090</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>0.50</td>
</tr>
<tr>
<td>FARE*1040</td>
<td>1.00</td>
</tr>
<tr>
<td>GEOG*1300</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Note: Co-op students must select COOP*1100 Introduction to Co-operative Education

Environmental Sciences Core

In addition to the common first year curriculum, students are required to take the following courses in Environmental Sciences courses in the semesters recommended in the schedule of studies:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*4001</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4002</td>
<td>0.50</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*2100</td>
<td>0.50</td>
</tr>
<tr>
<td>FARE*2700</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2210</td>
<td>0.50</td>
</tr>
</tbody>
</table>

A required statistics course is prescribed by the student's choice of major.

Environmental Sciences Majors

Ecology

Environmental and Resource Management

Environmental Economics and Policy

Environmental Sciences

Requirements for each of these majors are described in the detailed schedules of studies below.

Ecology (ECOL)

Department of Integrative Biology, College of Biological Science

This program provides a solid foundation in the principles of ecology, training in both pure and applied aspects of ecology and an introduction to economic, legal and policy issues related to the management of the environment. From the 2nd year on, students increasingly augment the core in ecology and policy with extensive restricted electives choices that allow the student to tailor the program to their interests. The major provides a sound science background for careers in conservation, resource management, ecological consulting, or nature interpretation used in teaching, government, non-government or the private sector; or for further post-graduate training in fundamental ecology, environmental biology and environmental management or policy.

Major

Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1070</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>0.50</td>
</tr>
<tr>
<td>ECON*1030</td>
<td>1.00</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Semester 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1090</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>0.50</td>
</tr>
<tr>
<td>FARE*1040</td>
<td>1.00</td>
</tr>
<tr>
<td>GEOG*1300</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Semester 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2060</td>
<td>0.50</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS*1080</td>
<td>0.50</td>
</tr>
<tr>
<td>PHYS*1300</td>
<td>0.50</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*2100</td>
<td>0.50</td>
</tr>
<tr>
<td>FARE*2700</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Note: Students lacking 4U physics or equivalent must take PHYS*1300. Students with 4U physics or equivalent must take PHYS*1080. PHYS*1130 may be substituted for PHYS*1080.

Note: GEOG*2210 may be substituted for ECON*2100 or FARE*2700 and would be taken in semester 4.
### Semester 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC*2580</td>
<td>[0.50]</td>
<td>Introduction to Biochemistry</td>
</tr>
<tr>
<td>BIOL*2400</td>
<td>[0.50]</td>
<td>Evolution</td>
</tr>
<tr>
<td>MBG*2040</td>
<td>[0.50]</td>
<td>Foundations in Molecular Biology and Genetics</td>
</tr>
<tr>
<td>STAT*2230</td>
<td>[0.50]</td>
<td>Biostatistics for Integrative Biology</td>
</tr>
</tbody>
</table>

0.50 electives or restricted electives

### Semester 5

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3010</td>
<td>[0.50]</td>
<td>Laboratory and Field Work in Ecology</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOT*2100</td>
<td>[0.50]</td>
<td>Life Strategies of Plants</td>
</tr>
<tr>
<td>ZOO*3600</td>
<td>[0.50]</td>
<td>Comparative Animal Physiology I</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT*3410</td>
<td>[0.50]</td>
<td>Plant Anatomy</td>
</tr>
<tr>
<td>ZOO*2090</td>
<td>[0.50]</td>
<td>Vertebrate Structure and Function</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

Note: ZOO*2700 may be substituted for BOT*3410 or ZOO*2090 and would be taken in semester 6.

### Semester 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3060</td>
<td>[0.50]</td>
<td>Populations, Communities &amp; Ecosystems</td>
</tr>
<tr>
<td>BIOL*3130</td>
<td>[0.50]</td>
<td>Conservation Biology</td>
</tr>
</tbody>
</table>

1.50 electives or restricted electives

### Semester 7

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*4001</td>
<td>[0.50]</td>
<td>Project in Environmental Sciences</td>
</tr>
</tbody>
</table>

2.00 electives or restricted electives

### Semester 8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*4002</td>
<td>[0.50]</td>
<td>Project in Environmental Sciences</td>
</tr>
</tbody>
</table>

2.00 electives or restricted electives

Note: See note in semester 7.

### Restricted Electives

Students are required to take 5.50 restricted credits in Ecology as noted below. Of these, at least 1.00 credits must be at the 4000 level.

1. A minimum of 0.50 credits from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4150</td>
<td>[0.50]</td>
<td>Wildlife Conservation and Management</td>
</tr>
<tr>
<td>CIS*1500</td>
<td>[0.50]</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>GEOG*2420</td>
<td>[0.50]</td>
<td>The Earth From Space</td>
</tr>
<tr>
<td>GEOG*2480</td>
<td>[0.50]</td>
<td>Mapping and GIS</td>
</tr>
<tr>
<td>GEOG*3420</td>
<td>[0.50]</td>
<td>Remote Sensing of the Environment *</td>
</tr>
<tr>
<td>GEOG*3480</td>
<td>[0.50]</td>
<td>GIS and Spatial Analysis *</td>
</tr>
<tr>
<td>GEOG*4480</td>
<td>[1.00]</td>
<td>Applied Geomatics *</td>
</tr>
</tbody>
</table>

* Additional prerequisites are required.

2. Students in the Ecology Major are required to take an additional 5.00 restricted elective credits from the following lists. Some courses may require other courses from the list as prerequisites.

#### Ecology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*3180</td>
<td>[0.50]</td>
<td>Wildlife Nutrition</td>
</tr>
<tr>
<td>BIOL*3450</td>
<td>[0.50]</td>
<td>Introduction to Aquatic Environments</td>
</tr>
<tr>
<td>BOT*3050</td>
<td>[0.50]</td>
<td>Plant Functional Ecology</td>
</tr>
<tr>
<td>ENVS*2030</td>
<td>[0.50]</td>
<td>Meteorology and Climatology</td>
</tr>
<tr>
<td>ENVS*3010</td>
<td>[0.50]</td>
<td>Climate Change Biology</td>
</tr>
<tr>
<td>ENVS*3270</td>
<td>[0.50]</td>
<td>Forest Biodiversity</td>
</tr>
<tr>
<td>ENVS*3290</td>
<td>[0.50]</td>
<td>Waterborne Disease Ecology</td>
</tr>
<tr>
<td>ENVS*4350</td>
<td>[0.50]</td>
<td>Forest Ecology</td>
</tr>
<tr>
<td>GEOG*2000</td>
<td>[0.50]</td>
<td>Geomorphology</td>
</tr>
<tr>
<td>GEOG*2110</td>
<td>[0.50]</td>
<td>Climate and the Biophysical Environment</td>
</tr>
<tr>
<td>GEOG*3000</td>
<td>[0.50]</td>
<td>Fluvial Processes</td>
</tr>
<tr>
<td>GEOG*3610</td>
<td>[0.50]</td>
<td>Environmental Hydrology</td>
</tr>
<tr>
<td>NUTR*3210</td>
<td>[0.50]</td>
<td>Fundamentals of Nutrition</td>
</tr>
<tr>
<td>ZOO*4570</td>
<td>[0.50]</td>
<td>Marine Ecological Processes</td>
</tr>
<tr>
<td>BIOL*4120</td>
<td>[0.50]</td>
<td>Evolutionary Ecology</td>
</tr>
<tr>
<td>BIOL*4150</td>
<td>[0.50]</td>
<td>Wildlife Conservation and Management</td>
</tr>
<tr>
<td>BIOL*4350</td>
<td>[0.50]</td>
<td>Limnology of Natural and Polluted Waters</td>
</tr>
<tr>
<td>ENVS*2040</td>
<td>[0.50]</td>
<td>Plant Health and the Environment</td>
</tr>
<tr>
<td>ENVS*2330</td>
<td>[0.50]</td>
<td>Current Issues in Ecosystem Science and Biodiversity</td>
</tr>
<tr>
<td>ENVS*3000</td>
<td>[0.50]</td>
<td>Nature Interpretation</td>
</tr>
<tr>
<td>ENVS*3010</td>
<td>[0.50]</td>
<td>Climate Change Biology</td>
</tr>
<tr>
<td>GEOG*2480</td>
<td>[0.50]</td>
<td>Mapping and GIS</td>
</tr>
<tr>
<td>GEOG*3020</td>
<td>[0.50]</td>
<td>Global Environmental Change</td>
</tr>
<tr>
<td>GEOG*3110</td>
<td>[0.50]</td>
<td>Biotic and Natural Resources</td>
</tr>
<tr>
<td>GEOG*3210</td>
<td>[0.50]</td>
<td>Management of the Biophysical Environment</td>
</tr>
<tr>
<td>GEOG*3480</td>
<td>[0.50]</td>
<td>GIS and Spatial Analysis</td>
</tr>
<tr>
<td>GEOG*4110</td>
<td>[1.00]</td>
<td>Environmental Systems Analysis</td>
</tr>
<tr>
<td>GEOG*4230</td>
<td>[0.50]</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>GEOG*4480</td>
<td>[1.00]</td>
<td>Applied Geomatics</td>
</tr>
</tbody>
</table>

### Credit Summary (20.00 Total Credits)

7.00 credits - Environmental Sciences core  
5.00 credits - Ecology Required courses  
5.50 credits - Ecology Restricted electives  
2.50 credits - Free electives

Students are reminded that 6.00 credits of their B.Sc. (Env.) degree must be at the 3000-4000 level.

Students are encouraged to seek advice on their choices from their faculty advisor. With prior approval, students may be able to use courses not on these lists towards their Ecology restrictive electives.

### Ecology (ECOL:C)

#### Department of Integrative Biology, College of Biological Science

This program provides a solid foundation in the principles of ecology, training in both pure and applied aspects of ecology and an introduction to economic, legal and policy issues related to the management of the environment. From the 2nd year on, students increasingly augment the core in ecology and policy with extensive restricted electives choices that allow the student to tailor the program to their interests. The major provides a sound science background for careers in conservation, resource management, ecological consulting, or nature interpretation used in teaching, government, non-government or the private sector; or for further post-graduate training in fundamental ecology, environmental biology and environmental management or policy.

#### Program Requirements

The Co-op program in Ecology is a four and a half year program including four work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: [https://www.recruitguelpark.ca/cecs/]). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Ecology Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>COOP*1100</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1000 Work Term I</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7</td>
<td>COOP*4000 Work Term IV</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

### Credit Summary (21.50 Total Credits)*

7.00 - Environmental Sciences core  
5.00 - Ecology Required courses  
8.00 - Electives or restricted electives  
3.50 - Specialized courses

* Additional prerequisites are required.

#### Note:

1.00 electives or restricted electives

#### Last Revision: July 4, 2019
5.50 - Ecology Restricted electives
2.50 - Free electives
1.50 - Co-op Work Terms

Note: A minimum of three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *COOP*4000 is optional and if completed the total number of credits will equal 22.00.

Students are reminded that 6.00 credits of their B.Sc. (Env.) degree must be at the 3000-4000 level.

Students are encouraged to seek advice on their choices from their faculty advisor. With prior approval, students may be able to use courses not on these lists towards their Ecology restrictive electives.

The recommended program sequence is outlined below.

**Major**

**Semester 1 - Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1070</td>
<td>[0.50]</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*1030</td>
<td>[1.00]</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1070</td>
<td>[0.50]</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>[0.50]</td>
</tr>
<tr>
<td>COOP*1100</td>
<td>[0.00]</td>
</tr>
<tr>
<td>FARE*1040</td>
<td>[1.00]</td>
</tr>
<tr>
<td>GEOP*1130</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

**Semester 2 - Winter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1090</td>
<td>[0.50]</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>[0.50]</td>
</tr>
<tr>
<td>COOP*1100</td>
<td>[0.00]</td>
</tr>
<tr>
<td>FARE*1040</td>
<td>[1.00]</td>
</tr>
<tr>
<td>GEOP*1130</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

**Semester 3 - Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2060</td>
<td>[0.50] Ecology</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS*1080</td>
<td>[0.50]</td>
</tr>
<tr>
<td>PHYS*1300</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*2100</td>
<td>[0.50]</td>
</tr>
<tr>
<td>FARE*2700</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

**Winter Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*1000</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

**Semester 4 - Summer**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2580</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*2000</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

**Semester 5 - Winter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2400</td>
<td>[0.50]</td>
</tr>
<tr>
<td>MBG*2040</td>
<td>[0.50]</td>
</tr>
<tr>
<td>STAT*2230</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

**Summer Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*3000</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

**Semester 6 - Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3010</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*4001</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT*2100</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ZOO*3600</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

One of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT*3410</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ZOO*2090</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

0.50 electives or restricted electives

Note: ZOO*2700 may be substituted for BOT*3410 or ZOO*2090 and would be taken in semester 7.

**Semester 7 - Winter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3060</td>
<td>[0.50]</td>
</tr>
<tr>
<td>BIOL*3130</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*4002</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

Note: See note in semester 6.

**Summer Semester (Optional)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*4000</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

**Semester 8 - Fall**

2.50 electives or restricted electives

**Restricted Electives**

Students are required to take 5.50 restricted credits in Ecology as noted below. Of these, at least 1.00 credits must be at the 4000 level.

1. A minimum of 0.50 credits from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4150</td>
<td>[0.50]</td>
</tr>
<tr>
<td>CIS*1500</td>
<td>[0.50]</td>
</tr>
<tr>
<td>GEOG*2420</td>
<td>[0.50]</td>
</tr>
<tr>
<td>GEOG*2480</td>
<td>[0.50]</td>
</tr>
<tr>
<td>GEOG*3420</td>
<td>[0.50]</td>
</tr>
<tr>
<td>GEOG*3480</td>
<td>[0.50]</td>
</tr>
<tr>
<td>GEOG*4480</td>
<td>[1.00]</td>
</tr>
</tbody>
</table>

* Additional prerequisites are required.

2. Students in the Ecology Major are required to take an additional 5.00 restricted elective credits from the following lists. Some courses may require other courses from the list as prerequisites.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*3180</td>
<td>[0.50]</td>
</tr>
<tr>
<td>BIOL*3450</td>
<td>[0.50]</td>
</tr>
<tr>
<td>BOT*3050</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*2030</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*3010</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*3270</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*3290</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*4330</td>
<td>[0.50]</td>
</tr>
<tr>
<td>GEOG*2000</td>
<td>[0.50]</td>
</tr>
<tr>
<td>GEOG*2110</td>
<td>[0.50]</td>
</tr>
<tr>
<td>GEOG*3000</td>
<td>[0.50]</td>
</tr>
<tr>
<td>GEOG*3610</td>
<td>[0.50]</td>
</tr>
<tr>
<td>NUTR*3210</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ZOO*4570</td>
<td>[0.50]</td>
</tr>
</tbody>
</table>

**Environmental Sciences (ENVS)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4120</td>
<td>[0.50]</td>
</tr>
<tr>
<td>BIOL*4150</td>
<td>[0.50]</td>
</tr>
<tr>
<td>BIOL*4350</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*2040</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*2330</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*3000</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*3010</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*2480</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*3020</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*3110</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*3210</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*3350</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*3450</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*3600</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*4350</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*4380</td>
<td>[0.50]</td>
</tr>
<tr>
<td>ENVS*4410</td>
<td>[1.00]</td>
</tr>
<tr>
<td>ENVS*4420</td>
<td>[1.00]</td>
</tr>
<tr>
<td>ENVS*4430</td>
<td>[1.00]</td>
</tr>
<tr>
<td>IBIO*4500</td>
<td>[1.00]</td>
</tr>
<tr>
<td>IBIO*4510</td>
<td>[1.00]</td>
</tr>
<tr>
<td>IBIO*4521</td>
<td>[1.00]</td>
</tr>
<tr>
<td>IBIO*4522</td>
<td>[1.00]</td>
</tr>
<tr>
<td>ZOO*4300</td>
<td>[0.75]</td>
</tr>
</tbody>
</table>

X. Degree Programs, Bachelor of Science in Environmental Sciences [B.Sc.(Env.)]

2019-2020 Undergraduate Calendar

Last Revision: July 4, 2019
This major combines a foundation in the breadth of environmental science while giving
students practical experience in integrating the basic science in environmental problem
solving. The integration of biophysical sciences with real-world applications provides
students with a unique skill set for engaging with current and future environmental issues.
The many opportunities in the major for experiential learning and independent research
give students an ability to collect, analyze and interpret environmental data, and propose
solutions that account for both the biophysical science and the socio-economic context.
The second year core curriculum develops a cross-disciplinary understanding of the
biophysical environment, while the third and fourth years allow students to engage more
deeply with issues of interest to them. Students will graduate from this major ready to
address diverse problems such as pollinator conservation, soil and water conservation,
greenhouse gas mitigation, plant disease management and chemical movement in the
environment. It provides a solid background for careers in environmental protection,
conservation, resource management and research, in both the public and private sectors.

**Major**

**Semester 1**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1070</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*1030</td>
<td>1.00</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Semester 2**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1090</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*1050</td>
<td>0.50</td>
</tr>
<tr>
<td>FARE*1040</td>
<td>1.00</td>
</tr>
<tr>
<td>GEOG*1300</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Semester 3**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*2030</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*2060</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*2240</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Semester 4**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2060</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*2080</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*2310</td>
<td>0.50</td>
</tr>
<tr>
<td>STAT*2040</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Semester 5**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*2100</td>
<td>0.50</td>
</tr>
<tr>
<td>FARE*2700</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*2210</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Semester 6**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*3150</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Semester 7**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*4001</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Semester 8**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*4002</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Restricted Electives**

Students must take a total of 6.50 restricted elective credits as prescribed by the following lists.

**List A**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*2330</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*2040</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**List B**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS*1070</td>
<td>0.50</td>
</tr>
<tr>
<td>PHYS*1080</td>
<td>0.50</td>
</tr>
<tr>
<td>PHYS*1300</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Students lacking 4U Physics or equivalent must take PHYS*1300.

Students are required to choose a minimum of 5.50 credits from Lists A, D, E, and F.

**List C**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*3130</td>
<td>0.50</td>
</tr>
<tr>
<td>CHEM*3360</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*2120</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*2210</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*2230</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3000</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3010</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3020</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3030</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3040</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3050</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3060</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3080</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3090</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3180</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3210</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3220</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3230</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3250</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3270</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3290</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3300</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3310</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3340</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*3370</td>
<td>0.50</td>
</tr>
<tr>
<td>MICR*3220</td>
<td>0.50</td>
</tr>
<tr>
<td>TOX*2000</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**List D**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4350</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4000</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4070</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4090</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4100</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4160</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4180</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4190</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4210</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4230</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4260</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4320</td>
<td>1.00</td>
</tr>
<tr>
<td>ENVS*4350</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4360</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4370</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4390</td>
<td>1.00</td>
</tr>
<tr>
<td>PBIO*4530</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**List E**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*4410</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4420</td>
<td>0.50</td>
</tr>
<tr>
<td>ENVS*4430</td>
<td>1.00</td>
</tr>
<tr>
<td>ENVS*4510</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**List F**

Students may count up to 1.00 credits from the following list towards their 6.50 credit
restricted electives.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*2480</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*3240</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*3480</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Credit Summary (20.00 Total Credits)**

- 7.00 credits - Environmental Sciences core
- 4.50 credits - Required Courses for the Major
- 5.50 credits - Restricted Electives
- 3.00 credits - Free electives

Students are encouraged to seek advice from their faculty advisor and are reminded that
6.00 credits of their B.Sc.(Env.) degree must be at the 3000-4000 level. With prior approval,
students may be able to use courses not on Lists C, D, E, or F toward their restricted
electives.

**Environmental Sciences (ENVS; C)**

School of Environmental Sciences, Ontario Agricultural College
This major combines a foundation in the breadth of environmental science while giving students practical experience in integrating the basic science in environmental problem solving. The integration of biophysical sciences with real-world applications provides students with a unique skill set for engaging with current and future environmental issues.

The many opportunities in the major for experiential learning and independent research give students an ability to collect, analyze and interpret environmental data, and propose solutions that account for both the biophysical science and the socio-economic context. The second year core curriculum develops a cross-disciplinary understanding of the biophysical environment, while the third and fourth years allow students to engage more deeply with issues of interest to them. Students will graduate from this major ready to address diverse problems such as pollinator conservation, soil and water conservation, greenhouse gas mitigation, plant disease management and chemical movement in the environment. It provides a solid background for careers in environmental protection, resource management and research, in both the public and private sectors.

Program Requirements

The Co-op program in Environmental Sciences is a four and a half year program including four work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: https://www.recruitingleph.ca/cecs/). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

Environmental Sciences Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>COOP*1100</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1000 Work Term I</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7</td>
<td>COOP*4000 Work Term IV</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

Credit Summary (21.50 Total Credits)*

7.00 - Environmental Sciences core
4.50 - Required Courses for the Major
5.50 - Restricted Electives
3.00 - Free electives
1.50 - Co-op Work Terms

Note: A minimum of three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *COOP*4000 is optional and if completed the total number of credits will equal 22.00.

Students are encouraged to seek advice from their faculty advisor and are reminded that 6.00 credits of their B.Sc.(Env.) degree must be at the 3000-4000 level. With prior approval, students may be able to use courses not on Lists C, D, E or F toward their restricted electives.

The recommended program sequence is outlined below.

Major

Semester 1 - Fall
BIOL*1070 [0.50] Discovering Biodiversity
CHEM*1040 [0.50] General Chemistry I
ENVS*1030 [1.00] Introduction to Environmental Sciences
MATH*1080 [0.50] Elements of Calculus I

Semester 2 - Winter
BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
CHEM*1050 [0.50] General Chemistry II
COOP*1100 [0.00] Introduction to Co-operative Education
FARE*1040 [1.00] Intro to Environmental Economics, Law & Policy
GEOG*1300 [0.50] Introduction to the Biophysical Environment

Semester 3 - Fall
ENVS*2030 [0.50] Meteorology and Climatology
ENVS*2060 [0.50] Soil Science
ENVS*2240 [0.50] Fundamentals of Environmental Geology

1.00 electives or restricted electives

Winter Semester
COOP*1000 [0.50] Co-op Work Term I

Semester 4 - Summer
STAT*2040 [0.50] Statistics I
2.00 electives or restricted electives

Fall Semester
COOP*2000 [0.50] Co-op Work Term II

Semester 5 - Winter
BIOL*2060 [0.50] Ecology
ENVS*2080 [0.50] Introduction to Environmental Microbiology
ENVS*2310 [0.50] Introduction to Biogeochemistry
1.00 electives or restricted electives

Summer Semester
ENVS*3000 [0.50] Co-op Work Term III

Semester 6 - Fall
ENVS*4001 [0.50] Project in Environmental Sciences
One of:
- ECON*2100 [0.50] Economic Growth and Environmental Quality
- FARE*2700 [0.50] Survey of Natural Resource Economics
1.50 electives or restricted electives

Students wishing to register in BIOL*4350 must substitute BIOL*3450 in Semester 6 for ENVS*3150 in Semester 7.

Semester 7 - Winter
ENVS*3150 [0.50] Aquatic Systems
ENVS*4002 [0.50] Project in Environmental Sciences
1.50 electives or restricted electives

Summer Semester - (Optional)
COOP*4000 [0.50] Co-op Work Term IV

Semester 8 - Fall
2.50 electives or restricted electives

Restricted Electives

Students must take a total of 6.50 restricted elective credits as prescribed by the following lists.
Students must take 0.50 credits from each of List A & B

List A
One of:
- ENVS*2330 [0.50] Current Issues in Ecosystem Science and Biodiversity
- ENVS*2040 [0.50] Plant Health and the Environment

List B
One of:
- PHYS*1070 [0.50] Physics for Life Sciences II
- PHYS*1080 [0.50] Physics for Life Sciences
- PHYS*1300 [0.50] Fundamentals of Physics

Students lacking 4U Physics or equivalent must take PHYS*1300. Students are required to choose a minimum of 5.50 credits from Lists C, D, E and F. Students must take a minimum of 1.50 credits from List C, a minimum of 1.00 credits from List D, and students may not count more than 1.00 credits from List F towards their restricted electives. Students should note that many restricted electives, particularly in List D, require other courses as prerequisites. Students should consult the most recent Undergraduate Calendar for specific requirements.

List C
Students must take a minimum of 1.50 credits from the following list:
BIOL*3130 [0.50] Conservation Biology
CHEM*3360 [0.50] Environmental Chemistry and Toxicology
ENVS*2120 [0.50] Introduction to Environmental Stewardship
ENVS*2210 [0.50] Apiculture and Honey Bee Biology
ENVS*2230 [0.50] Communications in Environmental Science
ENVS*3000 [0.50] Nature Interpretation
ENVS*3010 [0.50] Climate Change Biology
ENVS*3020 [0.50] Pesticides and the Environment
ENVS*3030 [0.50] Conservation Field Course
ENVS*3040 [0.50] Natural Chemicals in the Environment
ENVS*3050 [0.50] Micrometeorology
ENVS*3060 [0.50] Groundwater
ENVS*3080 [0.50] Soil and Water Conservation
ENVS*3090 [0.50] Insect Diversity and Biology
ENVS*3180 [0.50] Sedimentary Environments
ENVS*3210 [0.50] Plant Pathology
ENVS*3220 [0.50] Terrestrial Chemistry
ENVS*3230 [0.50] Agroforestry Systems
ENVS*3250 [0.50] Forest Health and Disease
ENVS*3270 [0.50] Forest Biodiversity
ENVS*3290 [0.50] Waterborne Disease Ecology
Students must take a minimum of 1.00 credits from the following list:

**List D**
- BIOL*4350 [0.50] Limnology of Natural and Polluted Waters
- ENVS*4000 [0.50] Toxicological Risk Assessment
- ENVS*4070 [0.50] Pollinator Conservation
- ENVS*4090 [0.50] Soil Management
- ENVS*4110 [0.50] Integrated Management of Invasive Insect Pests
- ENVS*4160 [0.50] Soil and Nutrient Management
- ENVS*4180 [0.50] Insecticide Biological Activity and Resistance
- ENVS*4190 [0.50] Biological Activity of Herbicides
- ENVS*4210 [0.50] Meteorological and Environmental Instrumentation
- ENVS*4230 [0.50] Biology of Aquatic Insects
- ENVS*4260 [0.50] Field Entomology
- ENVS*4320 [1.00] Laboratory and Field Methods in Soil Biodiversity
- ENVS*4350 [0.50] Forest Ecology
- ENVS*4360 [0.50] Glacial Environments
- ENVS*4370 [0.50] Environmental Organic Chemistry
- ENVS*4390 [1.00] Soil Variability and Land Evaluation
- PBIO*4530 [0.50] Plants and Environmental Pollution

**List E**
- ENVS*4410 [0.50] Introduction to Advanced Independent Research
- ENVS*4420 [0.50] Advanced Independent Research
- ENVS*4430 [1.00] Advanced Independent Research
- ENVS*4510 [0.50] Topics in Environmental Sciences

**List F**
Students may count up to 1.00 credits from the following list towards their 6.50 credit restricted electives.

- GEOG*2420 [0.50] The Earth From Space
- GEOG*2480 [0.50] Mapping and GIS
- GEOG*3420 [0.50] Remote Sensing of the Environment
- GEOG*3480 [0.50] GIS and Spatial Analysis

**Environmental Economics and Policy (EEP)**

**Department of Food, Agricultural and Resource Economics, Ontario Agricultural College**

This major provides the foundation for applying science and economics to environmental issues to produce effective environmental policy. Students gain an understanding of the policy tools and market mechanisms for managing our natural resources effectively. Knowledge and skills learned in this major will enable students to identify, prioritize, and solve environmental problems by integrating both scientific and economic theories and data. Equipped with the ability to look at current topics from the perspectives of economics, politics, and environmental sciences, students have a number of interesting career opportunities in the public, private, and NGO sectors. At the same time, the major fully prepares students to move onto professional and research graduate programs.

**Major**

**Semester 1**
- BIOL*1070 [0.50] Discovering Biodiversity
- CHEM*1040 [0.50] General Chemistry I
- ENVS*1030 [1.00] Introduction to Environmental Sciences
- MATH*1080 [0.50] Elements of Calculus I

**Semester 2**
- BIOL*1090 [0.50] Introduction to Molecular and Celluar Biology
- CHEM*1050 [0.50] General Chemistry II
- FARE*1040 [1.00] Intro to Environmental Economics, Law & Policy
- GEOG*1300 [0.50] Introduction to the Biophysical Environment

**Semester 3**
- ECON*1100 [0.50] Introductory Macroeconomics
- FARE*2700 [0.50] Survey of Natural Resource Economics

1.50 electives or restricted electives

**Semester 4**
- ECON*2310 [0.50] Intermediate Microeconomics
- ECON*2410 [0.50] Intermediate Macroeconomics
- ECON*2770 [0.50] Introductory Mathematical Economics

One of:
- ECON*2740 [0.50] Economic Statistics
- STAT*2040 [0.50] Statistics I

0.50 electives or restricted electives

**Note:** Students interested in the Statistics and Environmental Risk Assessment sequence in their restricted electives should choose STAT*2040 to satisfy the statistics requirement in the ENVS core.

**Semester 5**
- ECON*2100 [0.50] Economic Growth and Environmental Quality
- ECON*3740 [0.50] Introduction to Econometrics

1.50 electives or restricted electives

**Semester 6**
- FARE*3170 [0.50] Cost-Benefit Analysis

2.00 electives or restricted electives

**Semester 7**
- ECON*4930 [0.50] Environmental Economics
- ENVS*4001 [0.50] Project in Environmental Sciences
- FARE*4290 [0.50] Land Economics

1.00 electives or restricted electives

**Semester 8**
- ENVS*4002 [0.50] Project in Environmental Sciences
- FARE*4310 [0.50] Resource Economics

1.50 restricted electives or electives

**Restricted Electives**

Students in the Environmental Economics and Policy major are required to complete 6.00 credits in restricted electives. 2.50 restricted elective credits must be in FARE or ECON courses at the 3000 or 4000 level.

Courses in the following lists may be taken to satisfy the restricted electives requirement.
Courses are grouped to assist students select programs of study aimed at different educational and career paths.

**List A**
Students must select a minimum of 2.50 credits from the following lists:

1. **Quantitative Methods, Research and Graduate Studies**
   - ECON*3100 [0.50] Game Theory
   - ECON*3710 [0.50] Advanced Microeconomics
   - ECON*4640 [0.50] Advanced Econometrics
   - ECON*4700 [0.50] Advanced Mathematical Economics
   - ECON*4710 [0.50] Advanced Topics in Microeconomics
   - ECON*4750 [0.50] Topics in Public Economics
   - ECON*4840 [0.50] Financial Econometrics
   - FARE*4500 [0.50] Decision Science
   - FARE*4550 [0.50] Independent Studies I
   - FARE*4560 [0.50] Independent Studies II

2. **Policy Analysis**
   - ECON*2650 [0.50] Introductory Development Economics
   - ECON*3500 [0.50] Urban Economics
   - ECON*3580 [0.50] Economics of Regulation
   - ECON*3610 [0.50] Public Economics
   - ECON*3620 [0.50] International Trade
   - ECON*4830 [0.50] Economic Development
   - ECON*4880 [0.50] Topics in International Economics
   - EDRD*2650 [0.50] Introduction to Planning and Environmental Law
   - FARE*2410 [0.50] Agrifood Markets and Policy
   - FARE*3250 [0.50] Food and International Development
   - FARE*4000 [0.50] Agricultural and Food Policy
   - FARE*4210 [0.50] World Agriculture, Food Security and Economic Development
   - FARE*4550 [0.50] Independent Studies I
   - FARE*4560 [0.50] Independent Studies II
   - POLS*3370 [0.50] Environmental Politics and Governance

**List B**
Students must select a minimum of 1.00 credits from the following lists:

1. **Remote Sensing, Geographical Information Systems and Spatial Analysis**
   - GEOG*2420 [0.50] The Earth From Space
   - GEOG*2480 [0.50] Mapping and GIS
   - GEOG*3420 [0.50] Remote Sensing of the Environment
   - GEOG*3480 [0.50] GIS and Spatial Analysis
   - GEOG*4480 [1.00] Applied Geomatics

2. **Statistics and Environmental Risk Assessment**
   - STAT*2050 [0.50] Statistics II
   - STAT*3510 [0.50] Environmental Risk Assessment

**Note:** Students interested in this sequence should take STAT*2040 rather than ECON*2740 to satisfy the statistics requirement in the ENVS core.

3. **Earth Sciences**
   - ENVS*2030 [0.50] Meteorology and Climatology
   - ENVS*2060 [0.50] Soil Science
   - ENVS*2310 [0.50] Introduction to Biogeochemistry
The recommended program sequence is outlined below.

**Major**

**Semester 1 - Fall**
- BIOL*1070 [0.50] Discovering Biodiversity
- CHEM*1040 [0.50] General Chemistry I
- ENVS*1030 [1.00] Introduction to Environmental Sciences
- MATH*1080 [0.50] Elements of Calculus I

**Semester 2 - Winter**
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1050 [0.50] General Chemistry II
- COOP*4100 [0.00] Introduction to Cooperative Education
- FARE*1040 [1.00] Intro to Environmental Economics, Law & Policy
- GEOG*1300 [0.50] Introduction to the Biophysical Environment

**Semester 3 - Fall**
- ECON*1100 [0.50] Introductory Macroeconomics
- FARE*2700 [0.50] Survey of Natural Resource Economics
- 1.50 electives or restricted electives

**Winter Semester**
- COOP*1000 [0.50] Co-op Work Term I

**Semester 4 - Summer**
- ECON*2310 [0.50] Intermediate Microeconomics
- ECON*2410 [0.50] Intermediate Macroeconomics
- ECON*2770 [0.50] Introductory Mathematical Economics
- One of:
  - ECON*2740 [0.50] Economic Statistics
  - STAT*2040 [0.50] Statistics I
- 0.50 electives or restricted electives

**Note:** Students interested in the Statistics and Environmental Risk Assessment sequence in their restricted electives should choose STAT*2040 to satisfy the statistics requirement in the ENVS core. ECON*2740 may not be offered in the summer semester, so STAT*2040 should be taken if students wish to satisfy this program requirement in the summer semester.

**Fall Semester**
- COOP*2000 [0.50] Co-op Work Term II

**Semester 5 - Winter**
- ECON*3740 [0.50] Introduction to Econometrics
- FARE*3170 [0.50] Cost-Benefit Analysis
- 1.50 electives or restricted electives

**Summer Semester**
- COOP*3000 [0.50] Co-op Work Term III

**Semester 6 - Fall**
- ECON*2100 [0.50] Economic Growth and Environmental Quality
- ENVS*4001 [0.50] Project in Environmental Sciences
- 1.50 electives or restricted electives

**Semester 7 - Winter**
- ENVS*4002 [0.50] Project in Environmental Sciences
- FARE*4310 [0.50] Resource Economics
- 1.50 electives or restricted electives

**Summer Semester (Optional)**
- COOP*4000 [0.50] Co-op Work Term IV

**Semester 8 - Fall**
- ECON*4930 [0.50] Environmental Economics
- FARE*4290 [0.50] Land Economics
- 1.50 electives or restricted electives

**Restricted Electives**

Students in the Environmental Economics and Policy major are required to complete 6.00 credits in restricted electives. 2.50 restricted elective credits must be in FARE or ECON courses at the 3000 or 4000 level.

Courses in the following lists may be taken to satisfy the restricted electives requirement. Courses are grouped to assist students select programs of study aimed at different educational and career paths.

**List A**

Students must select a minimum of 2.50 credits from the following lists:

1. **Quantitative Methods, Research and Graduate Studies**
   - ECON*3100 [0.50] Game Theory
   - ECON*3710 [0.50] Advanced Microeconomics
   - ECON*4640 [0.50] Advanced Econometrics
   - ECON*4700 [0.50] Advanced Mathematical Economics
   - ECON*4710 [0.50] Advanced Topics in Microeconomics
   - ECON*4750 [0.50] Topics in Public Economics
   - ECON*4840 [0.50] Financial Econometrics
   - FARE*4500 [0.50] Decision Science

---

**Environmental Economics and Policy (EEP:C)**

**Department of Food, Agricultural and Resource Economics, Ontario Agricultural College**

This major provides the foundation for applying science and economics to environmental issues to produce effective environmental policy. Students gain an understanding of the policy tools and market mechanisms for managing our natural resources effectively. Knowledge and skills learned in this major will enable students to identify, prioritize and solve environmental problems by integrating both scientific and economic theories and data. Equipped with the ability to look at current topics from the perspectives of economics, politics and environmental sciences, students have a number of interesting career opportunities in the public, private and NGO sectors. At the same time, the major fully prepares students to move onto professional and research graduate programs.

**Program Requirements**

The Co-op program in Environmental Economics and Policy is a four and a half year program including four work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: [https://www.recruitguelph.ca/cecs/](https://www.recruitguelph.ca/cecs/)). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.

**Environmental Economics and Policy Academic and Co-op Work Term Schedule**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Semester</th>
<th>Winter Semester</th>
<th>Summer Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1000 Work Term I</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7</td>
<td>COOP*4000 Work Term IV</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Students are encouraged to seek advice on their choices from their faculty advisor.

**Credit Summary (21.50 Total Credits)**

- 7.00 - Environmental Sciences core
- 5.00 - Ecology Required courses
- 6.00 - Environmental Economics and Policy restricted electives
- 2.00 - Free electives
- 1.50 - Co-op Work Terms

**Note:** A minimum of three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *COOP*4000 is optional and if completed the total number of credits will equal 22.00.

Students are reminded that 6.00 credits of their B.Sc. (Env.) degree must be at the 3000 or 4000 level.
### 1. Remote Sensing, Geographical Information Systems and Spatial Analysis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*2420</td>
<td>The Earth From Space</td>
</tr>
<tr>
<td>GEOG*2480</td>
<td>Mapping and GIS</td>
</tr>
<tr>
<td>GEOG*3420</td>
<td>Remote Sensing of the Environment</td>
</tr>
<tr>
<td>GEOG*3480</td>
<td>GIS and Spatial Analysis</td>
</tr>
<tr>
<td>GEOG*4480</td>
<td>Applied Geomatics</td>
</tr>
</tbody>
</table>

### 2. Statistics and Environmental Risk Assessment

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT*2050</td>
<td>Statistics II</td>
</tr>
<tr>
<td>STAT*3510</td>
<td>Environmental Risk Assessment</td>
</tr>
</tbody>
</table>

### 3. Earth Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*2030</td>
<td>Meteorology and Climatology</td>
</tr>
<tr>
<td>ENVS*2060</td>
<td>Soil Science</td>
</tr>
<tr>
<td>ENVS*2310</td>
<td>Introduction to Biogeochemistry</td>
</tr>
<tr>
<td>ENVS*3060</td>
<td>Groundwater</td>
</tr>
</tbody>
</table>

### 4. Ecology and Conservation Biology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*2060</td>
<td>Ecology</td>
</tr>
<tr>
<td>BIOL*3060</td>
<td>Populations, Communities &amp; Ecosystems</td>
</tr>
<tr>
<td>BIOL*3130</td>
<td>Conservation Biology</td>
</tr>
<tr>
<td>BIOL*4150</td>
<td>Wildlife Conservation and Management</td>
</tr>
<tr>
<td>BIOL*4500</td>
<td>Natural Resource Policy Analysis</td>
</tr>
<tr>
<td>ENVS*2330</td>
<td>Current Issues in Ecosystem Science and Biodiversity</td>
</tr>
</tbody>
</table>

### 5. Toxicology and Environmental Chemistry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*3020</td>
<td>Pesticides and the Environment</td>
</tr>
<tr>
<td>ENVS*3040</td>
<td>Natural Chemicals in the Environment</td>
</tr>
<tr>
<td>ENVS*3220</td>
<td>Terrestrial Chemistry</td>
</tr>
<tr>
<td>TOX*2000</td>
<td>Principles of Toxicology</td>
</tr>
<tr>
<td>TOX*3360</td>
<td>Environmental Chemistry and Toxicology</td>
</tr>
</tbody>
</table>

### Environment and Resource Management (ERM)

**Department of Geography, Environment and Geomatics, College of Social and Applied Human Sciences**

The major focuses on environmental interactions and problem solving by developing an integrated biophysical environment - human environment perspective. In ERM, students will gain knowledge across the natural sciences, an understanding of how they interact, the skills (tools and techniques) needed to support decision making, as well as the methods of management and governance that are critical for environmental decision making. Beginning in first year students learn in the classroom and through hands-on work in labs and in the field. Students are expected to design and conduct experiments and problem solve using state-of-the-art computing and analytical tools. This major provides the knowledge, skills and methods an environmental scientist requires as environmental consultant, environmental manager, environmental and/or resource planner, geographic information systems analyst or to facilitate future graduate work.

### Major

#### Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1070</td>
<td>Discovering Biodiversity</td>
</tr>
<tr>
<td>CHEM*1040</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>ENVS*1030</td>
<td>Introduction to Environmental Sciences</td>
</tr>
<tr>
<td>MATH*1080</td>
<td>Elements of Calculus I</td>
</tr>
</tbody>
</table>

#### Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*1090</td>
<td>Introduction to Molecular and Cellular Biology</td>
</tr>
</tbody>
</table>

---

**CHEM*1050** [0.50] General Chemistry II

**FARE*1040** [1.00] Intro to Environmental Economics, Law & Policy

**GEOG*1300** [0.50] Introduction to the Biophysical Environment

### Semester 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*2100</td>
<td>Economic Growth and Environmental Quality</td>
</tr>
<tr>
<td>FARE*2700</td>
<td>Survey of Natural Resource Economics</td>
</tr>
</tbody>
</table>

1.00 electives

### Semester 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEG*2110</td>
<td>Climate and the Biophysical Environment</td>
</tr>
<tr>
<td>GEG*2210</td>
<td>Environment and Resources</td>
</tr>
<tr>
<td>GEG*2480</td>
<td>Mapping and GIS</td>
</tr>
</tbody>
</table>

1.00 electives or restricted electives

### Semester 5

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*2120</td>
<td>Introduction to Environmental Stewardship</td>
</tr>
<tr>
<td>GEG*3000</td>
<td>Fluvial Processes</td>
</tr>
<tr>
<td>GEG*3110</td>
<td>Biotic and Natural Processes</td>
</tr>
<tr>
<td>GEG*3210</td>
<td>Management of the Biophysical Environment</td>
</tr>
</tbody>
</table>

0.50 electives or restricted electives

**Note:** GEG*3160 may be substituted for GEG*3000 and would be taken in Semester 6.

### Semester 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEG*3480</td>
<td>GIS and Spatial Analysis</td>
</tr>
</tbody>
</table>

2.00 electives or restricted electives

### Semester 7

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*4001</td>
<td>Project in Environmental Sciences</td>
</tr>
<tr>
<td>GEG*4110</td>
<td>Environmental Systems Analysis</td>
</tr>
<tr>
<td>GEG*4210</td>
<td>Environmental Governance</td>
</tr>
</tbody>
</table>

0.50 electives or restricted electives

### Semester 8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS*4002</td>
<td>Project in Environmental Sciences</td>
</tr>
</tbody>
</table>

2.00 electives or restricted electives

### Restricted Electives

1. A minimum of 2 of the following courses:

- ENVS*4390 [1.00] Soil Variability and Land Evaluation
- GEG*4220 [0.50] Local Environmental Management
- GEG*4230 [0.50] Environmental Impact Assessment

2. An additional 1.00 credits in Geography (GEOG) at the 3000 level or higher.

### Credit Summary (20.00 Total Credits)

- 7.00 credits - Environmental Sciences core
- 6.00 credits - Environment and Resource Management Required courses
- 2.00 - 2.50 credits - Environment and Resource Management Restricted electives, depending on course selection
- 4.00 - 4.50 credits - Free electives, depending on course selection

Students are reminded that 6.00 credits of their B.Sc. (Env.) degree must be at the 3000-4000 level.

Students are encouraged to seek advice on their choices from their faculty advisor.

### Environment and Resource Management (ERM:C)

**Department of Geography, Environment and Geomatics, College of Social and Applied Human Sciences**

The major focuses on environmental interactions and problem solving by developing an integrated biophysical environment - human environment perspective. In ERM, students will gain knowledge across the natural sciences, an understanding of how they interact, the skills (tools and techniques) needed to support decision making, as well as the methods of management and governance that are critical for environmental decision making. Beginning in first year students learn in the classroom and through hands-on work in labs and in the field. Students are expected to design and conduct experiments and problem solve using state-of-the-art computing and analytical tools. This major provides the knowledge, skills and methods an environmental scientist requires as environmental consultant, environmental manager, environmental and/or resource planner, geographic information systems analyst or to facilitate future graduate work.

### Program Requirements

The Co-op program in Environment and Resource Management is a four and a half year program including four work terms. Students must complete a Fall, Winter and Summer work term, and must follow the academic work schedule as outlined below (also found on the Co-operative Education website: [https://www.recruitguelph.ca/cecs/](https://www.recruitguelph.ca/cecs/)). Please refer to the Co-operative Education program policy with respect to adjusting this schedule.
### Environment and Resource Management Academic and Co-op Work Term Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Semester 1</td>
<td>Academic Semester 2</td>
<td>Off</td>
</tr>
<tr>
<td>2</td>
<td>Academic Semester 3</td>
<td>COOP*1000 Work Term I</td>
<td>Academic Semester 4</td>
</tr>
<tr>
<td>3</td>
<td>COOP*2000 Work Term II</td>
<td>Academic Semester 5</td>
<td>COOP*3000 Work Term III</td>
</tr>
<tr>
<td>4</td>
<td>Academic Semester 6</td>
<td>Academic Semester 7</td>
<td>COOP*4000 Work Term IV</td>
</tr>
<tr>
<td>5</td>
<td>Academic Semester 8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To be eligible to continue in the Co-op program, students must meet a minimum 70% cumulative average requirement after second semester, as well as meet all work term requirements. Please refer to the Co-operative Education program policy with respect to work term performance grading, work term report grading and program completion requirements.

For additional program information students should consult with their Co-op Co-ordinator and Co-op Faculty Advisor, listed on the Co-operative Education web site.

### Credit Summary (21.50 Total Credits)*

- 7.00 - Environmental Sciences core
- 6.00 - Environment and Resource Management Required courses
- 2.00 - 2.50 - Environment and Resource Management Restricted electives, depending on course selection
- 4.00 - 4.50 - Free electives, depending on course selection
- 1.50 - Co-op Work Terms

*Note: A minimum of three Co-op work terms including a Summer, Fall, and Winter are necessary to complete the Co-op requirement. *COOP*4000 is optional and if completed the total number of credits will equal 22.00.

Students are reminded that 6.00 credits of their B.Sc. (Env.) degree must be at the 3000-4000 level.

Students are encouraged to seek advice on their choices from their faculty advisor.

The recommended program sequence is outlined below.

### Major

#### Semester 1 - Fall
- BIOL*1070 [0.50] Discovering Biodiversity
- CHEM*1040 [0.50] General Chemistry I
- ENVS*1030 [1.00] Introduction to Environmental Sciences
- MATH*1080 [0.50] Elements of Calculus I

#### Semester 2 - Winter
- BIOL*1090 [0.50] Introduction to Molecular and Cellular Biology
- CHEM*1050 [0.50] General Chemistry II
- COOP*1100 [0.00] Introduction to Co-operative Education
- FARE*1040 [1.00] Intro to Environmental Economics, Law & Policy
- GEOG*1300 [0.50] Introduction to the Biophysical Environment

#### Semester 3 - Fall
- ENVS*2120 [0.50] Introduction to Environmental Stewardship
- GEOG*2000 [0.50] Geomorphology
- GEOG*2480 [0.50] Mapping and GIS
- 1.00 electives or restricted electives

*Note: FARE*2700 may be substituted for ECON*2100 and may be taken in Semester 3 or 6. GEOG*2460 may be substituted for STAT*2040 and may be taken in Semester 3 or 6.

#### Winter Semester
- COOP*1000 [0.50] Co-op Work Term I

#### Semester 4 - Summer
- ECON*2100 [0.50] Economic Growth and Environmental Quality
- GEOG*2210 [0.50] Environment and Resources
- STAT*2040 [0.50] Statistics I
- 1.00 electives or restricted electives

#### Fall Semester
- COOP*2000 [0.50] Co-op Work Term II

#### Semester 5 - Winter
- GEOG*2110 [0.50] Climate and the Biophysical Environment
- GEOG*3480 [0.50] GIS and Spatial Analysis
- 1.50 electives or restricted electives

#### Summer Semester
- COOP*3000 [0.50] Co-op Work Term III

#### Semester 6 - Fall
- ENVS*4001 [0.50] Project in Environmental Sciences
- GEOG*3000 [0.50] Fluvial Processes
- GEOG*3110 [0.50] Biotic and Natural Resources
- GEOG*3210 [0.50] Management of the Biophysical Environment
- 0.50 electives or restricted electives

*Note: GEOG*3610 may be substituted for GEOG*3000 and would be taken in Semester 6.

#### Semester 7 - Winter
- ENVS*4002 [0.50] Project in Environmental Sciences
- 2.00 electives or restricted electives

#### Summer Semester (Optional)
- COOP*4000 [0.50] Co-op Work Term IV

#### Semester 8 - Fall
- GEOG*4110 [1.00] Environmental Systems Analysis
- GEOG*4210 [0.50] Environmental Governance
- 1.00 electives or restricted electives

### Restricted Electives

1. A minimum of 2 of the following courses:
   - ENVS*4390 [1.00] Soil Variability and Land Evaluation
   - GEOG*4220 [0.50] Local Environmental Management
   - GEOG*4230 [0.50] Environmental Impact Assessment

2. An additional 1.00 credits in Geography (GEOG) at the 3000 level or higher.
3. An additional 1.00 credits in Geography (GEOG) at the 3000 level or higher.

---

2019-2020 Undergraduate Calendar

Last Revision: July 4, 2019
Doctor of Veterinary Medicine (D.V.M.)

Program Information

The University of Guelph offers the degree program Doctor of Veterinary Medicine (D.V.M.) at the Ontario Veterinary College. The program is offered during the Fall and Winter semesters only and normally requires four years to complete. The college is accredited jointly by the Canadian and American Veterinary Medical Association, and the Royal College of Veterinary Surgeons of Britain. The D.V.M. degree from Guelph is respected by veterinarians throughout the world.

Objectives of the Program

1. The graduates should have the knowledge and skills appropriate to their career orientations and sufficient to allow the pursuit of a variety of careers in veterinary medicine, including graduate studies. They should be able to pass the examinations of all Canadian licensing bodies and must possess a fundamental core of academic veterinary science knowledge and of technical competence.

2. The graduates must be able to solve animal health problems and must have knowledge of the management of domestic animals and the functioning of the various animal industries.

3. The graduates must be able to communicate effectively, whether writing scientific papers or conversing with clients.

4. Through a commitment to continuing education, the graduates must accept the professional responsibility to stay abreast of new developments and to pursue solutions to new problems.

5. The graduates must have a genuine concern for the welfare of all animals. The graduates should be aware of their responsibilities to the profession in terms of ethical and professional conduct and have an understanding of the moral questions facing veterinarians.

6. The graduates must have had the opportunity during their university tenure to develop a range of non-veterinary interests sufficient to equip them to take a responsible role in society.

Regulations for Licence to Practise

Graduates are eligible to practise in Canada, but the degree in veterinary medicine does not in itself confer the right to practise. For information on matters relative to licence to practise in the various provinces of Canada, students should communicate with the Canadian Veterinary Medical Association, 339 Booth Street, Ottawa, Ontario, Canada K1R 7K1, who will refer them to the appropriate provincial veterinary association.

Admission to the Veterinary Medicine Program

Complete details on admission requirements and procedures are listed in Section IV--Admission Information. Additional information may be found at: http://www.ovc.uoguelph.ca/recruitment/en/index.asp

Academic Counselling

The Office of the Associate Dean, Students provides academic counselling and referral to other appropriate resources for all D.V.M. students. In particular, students who are requesting a Supplemental Privilege are required to meet with the Associate Dean so that the student can be informed of appropriate resources (such as Learning and Writing Services and the Counselling and Student Resource Centre) and use them to deal with his/her academic difficulties.

Conditions for Continuation of Study

For supplemental and deferred privileges, all students in the D.V.M. Program are subject to Deferred Privilege Procedures and Supplemental Privilege Procedures outlined in Chapter VIII--Undergraduate Degree Regulations and Procedures.

For continuation of study, a student must satisfy the conditions presented below. In order to graduate, students must fulfill the course requirements for the program and have achieved at least a 60% Program Average (PA). The Academic Review Sub-Committee will assess all cases where a student's academic progress does not meet the Continuation of Study requirements and will interpret the academic regulations. The requirements will be applied with due consideration to the credit weights of the course, the role of the course in the Phase and the degree of integration of the course with concurrently required, and in light of the student's particular circumstances (see VIII--Undergraduate Degree Regulations and Procedures).

Full-time Study

The D.V.M. program is offered as a full-time program and normally requires four years (over the equivalent of eight academic semesters at the University of Guelph) to complete. In exceptional extenuating circumstances, the Academic Review Sub-Committee may allow a student to take courses on a part-time basis. In these instances, the Academic Review Sub-Committee has the discretion to select the courses that the student will register in on a part-time basis. Students permitted to take courses on a part-time basis are cautioned that there is an enrolment limitation for the program and that access to certain courses or resumption of the program on a full-time basis will be conditional on the availability of space.

Failed Courses

1. Continuation of study from one phase of the D.V.M. Program to the next is dependent on the successful completion of all courses, or approved equivalents, in the published schedule of studies for the D.V.M. Program.

2. A student who fails one course in a Phase may be required to repeat all courses in the Phase. The consequences of failure of any particular course in the D.V.M. Program are as follows:

   a. Failure in any of the following courses result in the Repeat of the Course:
      VETM*3210, VETM*3390, VETM*3430, VETM*3220, VETM*3440, VETM*3510, VETM*4220, VETM*4450, VETM*4530, VETM*4610, VETM*4660, VETM*4710, VETM*4870, VETM*4900, VETM*4920.

   b. Failure in any of the following courses result in the Repeat of the Phase:
      VETM*3070, VETM*3080, VETM*3120, VETM*3400, VETM*3410, VETM*3450, VETM*3460, VETM*3470, VETM*4460, VETM*4470, VETM*4480, VETM*4490, VETM*4540.

This information is also available as part of the Phase Handbooks.

3. A student will be allowed to fail a particular course only once. Any student who fails the same course twice will be required to withdraw and will be ineligible for readmission to the D.V.M. Program.

4. Grades obtained by D.V.M. students who repeat one or more VETM course(s) will be reported on the transcript in addition to the original course grade. In the instance where all courses in a Phase are repeated, the grades from the repeated VETM courses will constitute the new Phase Average (PHA). The new D.V.M. Program Average will include the grades obtained in both the original and repeated VETM course attempts.

Supplemental Privileges

1. In the circumstances of a failed course, the Academic Review Sub-Committee may, if appropriate and under special circumstances only, allow a student the opportunity to gain credit standing in a failed course by granting a supplemental privilege (see Failed Courses and Supplemental Privilege in Section VIII). Students must request a supplemental privilege by submitting the request to the Academic Review Sub-Committee, and the fee for the privilege, within 7 days of the release of grades for the phase in which the failure occurred. The Academic Review Sub-Committee, upon receiving a request from a student, and after consulting with the instructor and reviewing the student's course performance, will determine whether a supplemental privilege should be granted.

2. Students will be permitted supplemental privileges in a maximum of two courses over the entire D.V.M. Program. A supplemental privilege will not be granted for a second failure in a course. Any student granted a supplemental privilege must meet with the Associate Dean for Student Affairs who will inform the student of appropriate resources to be used to deal with his/her academic difficulties.

Conditions for Graduation

In order to qualify for graduation from the D.V.M. program, the student must have completed successfully all of the courses approved for the program. Students will not be allowed to graduate with a PA of < 60% or PHA of < 60% in Phase 4.

Voluntary Withdrawal from the Program

Students who have voluntarily withdrawn from the D.V.M. program and who wish to return must give notice to the Associate Dean, Students O.V.C. of their intention to return by May 31 if they wish to return in September of the upcoming academic year. Students contemplating a withdrawal from the program are cautioned that there is an enrolment limitation for the program and that re-entry will be conditional on the availability of space.

The Program Committee reserves the right to select the quota from among the qualified applicants.

Estimate of Expenses

Attention is drawn to Section VI--Schedule of Fees for information on tuition, University student organizations and rabies immunization required for all students in the program. In addition, while the college supplies most laboratory equipment, students may wish to purchase instruments for personal use. Texts, protective clothing, and a minimum of supplies for personal use may cost approximately $500 per semester.

Health and Safety

Students must follow the health and safety policies required for the various courses in the veterinary program. Pregnant students and others with increased medical risks should consult the Health Services for concerning potential health risks which may occur during the normal course of their studies.

Immunization against rabies is a requirement for admission and continuation in the D.V.M. Program. Annual rabies titres and booster immunizations (if necessary) are mandatory for all Program participants. Prospective students and in-course students should contact Student Health Services (519-824-4120 extension 52131) for further information and guidance about the rabies surveillance program. Faculty and staff members should contact Occupational Health Services, extension 52133, for information about medical surveillance programs provided in accordance with University Safety Policy 851.13.03.

X. Degree Programs, Doctor of Veterinary Medicine (D.V.M.) 487

2019-2020 Undergraduate Calendar
Schedule 5 (D.V.M. Continuation of Study)

Continuation of Study is assessed on the student's D.V.M. Program Average (not the University Cumulative Average) and according to the policy on failures as stated above. In Phase 2 and beyond, eligibility to continue is also assessed at the end of each Phase using the Phase Average (PHA). Courses that are given a grade of Pass or Fail do not affect either the PA or PHA because they are not attached to any numerical grade.

Students required to repeat a Phase must achieve the required PA of greater than or equal to 60% by the end of the repeated Phase. If a student does not achieve the required standing by the end of the repeated Phase, he or she will normally be required to withdraw from the program.

**The required averages are as follows:**

### For Course Attempts in Phase 1

<table>
<thead>
<tr>
<th>Program Average (PA)</th>
<th>Status of Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA &lt; 50%</td>
<td>Required to Withdraw</td>
</tr>
<tr>
<td>PA ≥ 50% but &lt; 60%</td>
<td>Required to Repeat Phase</td>
</tr>
<tr>
<td>PA ≥ 60%</td>
<td>Eligible to Continue</td>
</tr>
</tbody>
</table>

### For Course Attempts in Phase 2 and Phase 3

<table>
<thead>
<tr>
<th>Program Average (PA) and Phase Average (PHA)</th>
<th>Status of Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHA &lt; 50%</td>
<td>Required to Withdraw</td>
</tr>
<tr>
<td>PA or PHA ≥ 50% but &lt; 60%</td>
<td>Required to Repeat Phase*</td>
</tr>
<tr>
<td>PA and PHA ≥ 60%</td>
<td>Eligible to Continue</td>
</tr>
</tbody>
</table>

* Students required to repeat Phase 3 will not be permitted to proceed to the Externship course prior to Phase 4.

### If Repeating Phase 1, 2, or 3

Continuation of Study Assessment for DVM Students Repeating Phase 1, 2 or 3

<table>
<thead>
<tr>
<th>Program Average (PA)</th>
<th>Status of Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA &lt; 60%</td>
<td>Required to Withdraw</td>
</tr>
<tr>
<td>PA ≥ 60%</td>
<td>Eligible to Continue</td>
</tr>
</tbody>
</table>

### For Course Attempts in Phase 4

Continuation of Study Assessment for DVM Students in Phase 4

<table>
<thead>
<tr>
<th>Program Average (PA) and Phase Average (PHA)</th>
<th>Status of Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHA &lt; 50%</td>
<td>Required to Withdraw</td>
</tr>
<tr>
<td>PA or PHA ≥ 50% but &lt; 60%</td>
<td>Required to Remediate**</td>
</tr>
<tr>
<td>PA and PHA ≥ 60%</td>
<td>Eligible to Continue***</td>
</tr>
</tbody>
</table>

** Students finishing Phase 4 with a PA or PHA ≥ 50% but < 60%, will not be permitted to graduate. The Academic Review Sub-Committee will establish the appropriate remediation requirements that must be fulfilled in order for the student to obtain the standing of Eligible to Graduate. These may include repeating a component of a course, one or more entire courses, or one or more clinical rotations.

*** Students finishing Phase 4 with a PA and PHA ≥ 60% and having satisfied all course requirements for the program are Eligible to Graduate.

**Schedule of Studies**

### Phase 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VETM*3070</td>
<td>2.00</td>
</tr>
<tr>
<td>VETM*3080</td>
<td>2.00</td>
</tr>
<tr>
<td>VETM*3120</td>
<td>0.75</td>
</tr>
<tr>
<td>VETM*3210</td>
<td>0.50</td>
</tr>
<tr>
<td>VETM*3390</td>
<td>0.50</td>
</tr>
<tr>
<td>VETM*3400</td>
<td>0.75</td>
</tr>
<tr>
<td>VETM*3430</td>
<td>0.25</td>
</tr>
</tbody>
</table>

### Phase 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VETM*3220</td>
<td>0.50</td>
</tr>
<tr>
<td>VETM*3410</td>
<td>0.75</td>
</tr>
<tr>
<td>VETM*3440</td>
<td>0.50</td>
</tr>
<tr>
<td>VETM*3450</td>
<td>2.75</td>
</tr>
<tr>
<td>VETM*3460</td>
<td>0.75</td>
</tr>
<tr>
<td>VETM*3470</td>
<td>0.75</td>
</tr>
<tr>
<td>VETM*3510</td>
<td>0.25</td>
</tr>
</tbody>
</table>

### Phase 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VETM*4220</td>
<td>0.50</td>
</tr>
<tr>
<td>VETM*4420</td>
<td>0.25</td>
</tr>
<tr>
<td>VETM*4450</td>
<td>0.50</td>
</tr>
</tbody>
</table>

### Phase 4

Students entering into the Phase 4 of the DVM Program will select an area of emphasis from either: Small Animal Stream, Rural Community Practice Stream, Equine Stream or the Food Animal Stream.

**Small Animal Stream:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VETM*4610</td>
<td>7.50</td>
</tr>
<tr>
<td>VETM*4900</td>
<td>2.50</td>
</tr>
</tbody>
</table>

**Rural Community Practice Stream:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VETM*4660</td>
<td>7.50</td>
</tr>
<tr>
<td>VETM*4900</td>
<td>2.50</td>
</tr>
</tbody>
</table>

**Equine Stream:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VETM*4920</td>
<td>7.50</td>
</tr>
<tr>
<td>VETM*4900</td>
<td>2.50</td>
</tr>
</tbody>
</table>

**Food Animal Stream:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VETM*4710</td>
<td>7.50</td>
</tr>
<tr>
<td>VETM*4900</td>
<td>2.50</td>
</tr>
</tbody>
</table>

2019-2020 Undergraduate Calendar

Last Revision: July 4, 2019
Co-operative Education Programs

Co-operative Education (Co-op), constitutes part of the student’s formal education and is available in over 35 majors for students. A form of experiential learning, Co-op is a model of education that integrates a student’s academic learning with periods of paid workplace learning in fields relevant to the student’s academic and personal/professional goals. The academic and work schedules will vary with degree program and major. The first co-op work term is scheduled after the third or fourth academic semester, providing workplace learning in fields relevant to the student’s academic and personal/professional goals. The academic and work schedules will vary with degree program and major. The first co-op work term is scheduled after the third or fourth academic semester, providing workplace learning in fields relevant to the student’s academic and personal/professional goals. The academic and work schedules will vary with degree program and major.

Each co-op position is developed and approved in collaboration between the employer and Co-operative Education & Career Services (CECS). Students participate in a competitive employment process to secure an approved co-op position that is relevant to the student’s area of academic study. COOP^1100 – Introduction to Co-operative Education, a mandatory, non-credit course, is a prerequisite for the first co-op work term and prepares the student for the employment process.

The student’s performance in the workplace is supervised and evaluated by the student’s employer using the Work Performance Evaluation tool. The student’s progress during the work term is also monitored by CECS, which may include a site visit during the co-op work term and a review of the student’s official Learning Goals. A Co-op Work Report is required for each co-op work term and is graded by an assigned Co-op Faculty Advisor. All evaluation grades will appear on the student’s official transcript.

The Co-operative Education program at the University of Guelph is accredited by the Co-operative Education and Work Integrated Learning Canada (CEWIL), therefore standardized guidelines regarding co-op programs will be followed at all times. Course requirements and schedules of studies for specific majors are listed under the appropriate degree program in this section.

In addition to Co-operative Education CECS supports, trains and leads students and alumni as they make career and further education planning decisions. Successful students connect with CECS early in their academic career and take full advantage of the career planning and job search services offered. CECS helps students to discern “what to do with their degree”. As well, the CECS job posting service, Recruit Guelph, provides online job postings including full-time, part-time, contract, seasonal, and internships. Job & Career Fairs and employer networking events also provide exposure to the working world. Please refer to https://www.recruitguelph.ca/cecs for more information.

Admission Information

Normally students are admitted to a Co-operative Education program directly from high school in the Fall semester through Admission Services. For a complete listing of University of Guelph admission requirements refer to www.uoguelph.ca/admissions. Some programs may admit a limited number of in-course students after first or second semester. Refer to the schedule of dates in the Undergraduate Calendar for in-course application deadlines.

External transfer students may apply to Co-operative Education following admission to the University of Guelph. Students must not be beyond second year of their studies and be interested in one of over 35 co-operative education programs available at the University of Guelph. Interested students should visit https://www.recruitguelph.ca/cecs/COOP-external-transfer-students for up-to-date information on admission eligibility.

The decision to admit an in-course or external transfer student is dependent upon space availability in the program, the student achieving the required Grade Point Average (GPA) in the previous academic year, and completion of all necessary prerequisites. If the student passes the first co-op work term, the student must maintain at least 70% (C) average in all academic courses for the academic year preceding the second co-op work term.

Students are required to meet all academic requirements as outlined in the Undergraduate Calendar. Students must meet all academic requirements as outlined in the Undergraduate Calendar. Students must meet all academic requirements as outlined in the Undergraduate Calendar. Students must meet all academic requirements as outlined in the Undergraduate Calendar.

Co-op students are required to register full-time for the duration of their program as outlined in the schedule of studies listed in the Undergraduate Calendar. Co-op students are also required to meet other conditions, (e.g. satisfactory co-op work reports, work performance evaluations and learning goals) in order to continue in the co-op program.

Complete conditions for continuation of study for a co-op program are outlined in the “Policy Agreement for Student Involvement in Co-operative Education University of Guelph”. The complete policy can be viewed at https://www.recruitguelph.ca/cecs/sites/uoguelph.ca.cecs/files/public/Co-opPolicyAgreement.pdf

* Students that cannot follow the prescribed schedule for their co-op program due to a disability may require an approved accommodation plan. CECS must approve the accommodation plan and students may be required to provide additional information during the approval process.

Release of Academic Information

By applying to the co-op program, students grant permission to the Office of Registrarial Services to release Co-operative Education & Career Services their University of Guelph transcript and any transcript from other post-secondary institutions that may be part of the academic record held by the Office of Registrarial Services.

Students also grant permission to Co-operative Education & Career Services to release their resumes, cover letters and any transcripts released by the Office of Registrarial Services to prospective employers to whom the students are applying. Employment information, the Co-op Work Performance Evaluation grade, and the Co-op Work Report Evaluation grade will appear on the student’s official academic transcript for each co-op work term accepted by the student. Students also grant permission for employment information to be released for use in statistical analysis at the University of Guelph.

Procedures for Work Term Reports

A Co-op Work Report is required for each co-op work term which the student accepts. Co-op Work Reports must be submitted to the Co-op Faculty Advisor according to the deadline indicated in the Undergraduate Calendar. The CECS Job Posting Service is responsible for grading the co-op work report within the agreed to deadlines listed in the Schedule of Dates. Students completing two or more consecutive co-op work terms with the same employer should consult with their Co-op Faculty Advisor regarding co-op work report requirements for eight or twelve month co-op work terms.

A grade of Outstanding, Very Good, Good, Satisfactory, or Unsatisfactory will appear on the student’s Academic Record. A student who does not submit a Co-op Work Report will be required to withdraw from co-op and a grade of “Required to Withdraw from Co-op” will be assigned to the student’s official transcript. A student who receives an Unsatisfactory Co-op Work Report Evaluation will be given one opportunity to make revisions and resubmit the co-op report during the semester following the co-op work term. Students who are resubmitting a co-op work report within the prescribed timeline will not be eligible to proceed to the next employment process until receiving a grade of Satisfactory or higher on the report. If, upon resubmission, the co-op work report evaluation remains Unsatisfactory, the student will be required to withdraw from Co-op and will be transferred to the regular program.

Confidential Co-op Work Reports are not permitted.

Conditions for Graduation

In order to graduate with co-op certification, co-op students must follow the conditions for graduation for their degree program as outlined in the Undergraduate Calendar in lieu of the requirements outlined in this section. The student must be in compliance with the approved Academic & Work Sequence Agreement, and any other information relevant to the program.

Note: Due to the Schedule of Studies for Hotel & Tourism Management co-op there is no Winter start date available. Students must begin their program in the Fall term.

Eligibility

High school students must have a minimum average of 80% to apply to the co-op program. Once accepted to the University of Guelph, the student must maintain a 70% cumulative average in the first 2 semesters of full-time study in order to continue in the co-op program.

First year in-course students must maintain a 70% cumulative average in their academic semester(s) prior to admission to the co-op program. There must also be space in the co-op program in which they wish to be admitted.

External transfer students must meet normal admission requirements, as well as submit an official transcript from their previous educational institution, and may be required to achieve a minimum 70% cumulative average prior to participating in the co-op employment process. An academic and work schedule must also be approved by the academic department prior to the student being accepted into the co-op program.

Continuation of Study

Students are required to meet a continuation requirement at the end of semester two. Students will be allowed to continue in the co-op program if their cumulative average, over 4.0 credits, is 70% or higher after two full-time academic semesters. * Students are also required to meet the conditions for continuation of study for their degree program as listed in the Undergraduate Calendar. In addition, all students must satisfactorily complete COOP^1100 - Introduction to Co-operative Education in the semester scheduled.
Withdrawing from Co-op after accepting an eight or twelve month co-op work term will result in the student being responsible for paying the balance of their remaining co-op academic fees at the time of withdrawal.

**Schedule of Studies**

Students are required to follow the schedule of studies as outlined in the Undergraduate Calendar. Where a program has two co-op stream options, students will be defaulted to an established “Stream A”.

If, under exceptional circumstances, the schedule cannot be followed, the student must obtain written approval of an alternative Co-op Academic & Work Sequence Agreement from the academic department and submit the form to CECS for final approval. These exceptions are listed on the sequence form.

There is no guarantee that a sequence revision will be approved.
University of Guelph-Humber

For University of Guelph-Humber programs please refer to http://www.guelphhumber.ca.
Associate Diploma Programs

For Associate Diploma Programs please refer to the Associate Diploma Program Calendar, available on the world wide web at http://www.uoguelph.ca/diploma_calendar/.
XI. Special Study Opportunities

Certificates and Diplomas

The University offers certificate and diploma programs for those who want to develop or upgrade skills in one of these areas without necessarily proceeding towards a three- or four-year degree program. These programs may be completed on a part-time basis.

Students currently registered in a degree program or intending to transfer into a degree program, should note double-counting regulations. Up to 50% of the requirements for a degree-credit certificate/diploma may be applied toward a minor, major or area of emphasis. The remaining 50% of the certificate/diploma requirements may be applied to electives, provided the specific courses in the certificate/diploma meet degree program requirements.

For more information on double-counting regulations, undergraduate students should consult with the program counsellor for the degree program they seek to complete. Note that the Certificate in Leadership is exempt from this restriction.

Students apply for a certificate after they have completed all the courses by completing a Certificate Application Request Form. For more information on the certificates, please email Open Learning and Educational Support <info@opened.uoguelph.ca>.

Certificate in Business

The Certificate in Business is designed to be beneficial to those who are not enrolled in a business program, but wish to gain knowledge of business concepts. It provides participants with opportunities to develop the professional skills essential for success in business environments. The functional areas of business are introduced in required courses. Participants may customize their learning through their choice of electives by either focusing on one particular subject area or selecting from different subject areas for more breadth. The Certificate in Business, available to both undergraduate students and open learners, is offered by the University of Guelph through the Gordon S. Lang School of Business and Economics.

Required Course

MGM*1250 [0.50] Introduction to Canadian Business Management *

Restricted Electives

2.00 credit from:

- ACCT*1220 [0.50] Introductory Financial Accounting
- ACCT*2230 [0.50] Management Accounting
- ECON*1050 [0.50] Introductory Microeconomics
- ECON*1100 [0.50] Introductory Macroeconomics
- EDRD*3140 [0.50] Organizational Communication
- ENGG*3240 [0.50] Engineering Economics
- FARE*3310 [0.50] Operations Management
- HRDB*2090 [0.50] Individuals and Groups in Organizations
- HROB*2200 [0.50] Labour Relations
- MCS*1000 [0.50] Introductory Marketing
- MCS*2020 [0.50] Information Management
- MCS*2120 [0.50] Personal Financial Management
- MCS*3000 [0.50] Advanced Marketing
- POLS*3470 [0.50] Business-Government Relations in Canada

* Note: Students registered in B.COMM. or the minors in Business, Business Economics, or Marketing or in the BA European Studies program with an emphasis in European Business are not eligible for this Certificate.

Certificate in Civic Engagement and Global Citizenship

The value of combining a sense of self as a global citizen with the dynamic nature of civic engagement can result in a practical, informed and hopeful approach to addressing complex local and global problems shaped by different cultures, political systems and environments. The certificate in Civic Engagement and Global Citizenship aims to provide students with an opportunity to develop the professional skills essential for success in business environments. The functional areas of business are introduced in required courses. Participants may customize their learning through their choice of electives by either focusing on one particular subject area or selecting from different subject areas for more breadth. The Certificate in Civic Engagement and Global Citizenship, available to both undergraduate students and open learners, is offered online through University of Guelph's School of Environmental Design and Rural Development, and is structured as follows:

Required Courses

EDRD*2020*DE [0.50] Interpersonal Communication
EDRD*3120*DE [0.50] Educational Communication
EDRD*3140*DE [0.50] Organizational Communication
EDRD*3160*DE [0.50] International Communication
EDRD*4120*DE [0.50] Leadership Development in Small Organizations

For more information, visit the website at: http://www.communicationprocess.ca/

Certificate in Environmental Citizenship

Developed from a social science perspective, this Certificate is beneficial to those who want to learn more about the global environmental issues facing us today and in the future. Participants gain in-depth knowledge about environmental changes, their global impact, and how one can directly contribute to the environment's sustainability. The Certificate consists of six degree-credit distance education courses taken online from the University of Guelph's School of Environmental Sciences. It is structured as follows, requiring six courses total, to include at least two at the 3000 or 4000 level:

Required Course

ENVS*2700*DE [0.50] Environmental Perspectives and Choice

2 or 3 of the following:

- BOT*2000*DE [0.50] Plants, Biology and People
- ECON*1050*DE [0.50] Introductory Microeconomics
- ECON*2100*DE [0.50] Economic Growth and Environmental Quality
- EDRD*3500*DE [0.50] Recreation and Tourism Planning
- ENVS*2120*DE [0.50] Introduction to Environmental Stewardship
- GEOG*1220*DE [0.50] Human Impact on the Environment
Certificate in Environmental Conservation

Developed from a biophysical science perspective, this Certificate is beneficial to those who want to gain knowledge of issues surrounding environmental protection, conservation and preservation, and environmental research. The Certificate consists of six degree-credit distance education courses taken online from the University of Guelph's School of Environmental Sciences. The program is designed to provide participants with the credentials they need for professional advancement in the environment industry and/or personal enrichment. It is structured as follows, requiring six courses total, to include at least two at the 3000 or 4000 level:

Required Course
ENVS*2120*DE [0.50] Introduction to Environmental Stewardship

2 or 3 of the following:
EDRD*3450*DE [0.50] Watershed Planning Practice
GEOG*1220*DE [0.50] Human Impact on the Environment
GEOG*1300*DE [0.50] Introduction to the Biophysical Environment
ENVS*1060*DE [0.50] Principles of Geology
ENVS*2250*DE [0.50] Geology of Natural Disasters
ENVS*2060*DE [0.50] Soil Science
ENVS*3080*DE [0.50] Soil and Water Conservation

2 or 3 of the following:
BIOL*2060*DE [0.50] Ecology
BIOL*3450*DE [0.50] Introduction to Aquatic Environments
ENVS*3000*DE [0.50] Nature Interpretation
ENVS*3040*DE [0.50] Natural Chemicals in the Environment
GEOG*2210*DE [0.50] Environment and Resources
GEOG*3020*DE [0.50] Global Environmental Change
GEOG*3210*DE [0.50] Management of the Biophysical Environment

For more information, please visit the website at: http://www.environmentalcertificates.com.

Certificate in Food Science

The Certificate in Food Science program is offered by the Department of Food Science to University of Guelph undergraduate students or online to Open Learning program students. It concentrates on the chemistry, analysis, microbiology and processing of foods, and on the maintenance of food safety and quality throughout. The Food Science certificate program provides recognition for food science education for University of Guelph students not in the B.Sc. Food Science Major and for individuals outside of the University of Guelph interested in the field of Food Science. Post-secondary courses in microbiology and chemistry are prerequisites for entrance into the program.

In-course students can select courses and when completed apply for the certificate through the Open Learning and Educational Support office (note the double-counting rule under XI. Special Study Opportunities, Certificates and Diplomas). Individuals from outside the University of Guelph should register for courses through the Open Learning and Educational Support office.

The DE courses of the program cannot be used as substitutes for core courses or restricted electives in the B.Sc. Food Science Major.

Required Courses
FOOD*2010*DE or FOOD*2150
FOOD*2410*DE or FOOD*3160

1 of:
FOOD*3340*DE [0.50] Introduction to Food Analysis
FOOD*4190 [0.50] Advanced Food Analysis
FOOD*4310*DE [0.50] Food Safety Management Systems

1 of:
FOOD*2400*DE [0.50] Introduction to Food Chemistry
FOOD*3030 [0.50] Food Chemistry I
FOOD*3050 [0.50] Food Chemistry I

1 of:
FOOD*4240*DE [0.50] Introduction to Food Microbiology

FOOD*3220 [0.75] Food Microbiology
FOOD*3240 [0.50] Food Microbiology

For more information, please visit the website at: http://www.foodsciencecertificate.com.

Certificate in German Language and Culture

The Certificate in German Language and Culture provides students with an intermediate level (B1) of competency in the German language and awareness of the cultures of German-speaking countries.

A minimum of 2.50 credits is required, including:

Required Courses
GERM*1100 [0.50] Introductory German I
GERM*1110 [0.50] Introductory German II
GERM*2010 [0.50] Intermediate Language Practice
GERM*2490 [0.50] Intermediate German

1 of:
GERM*3150 [0.50] Interactive German Language and Culture
GERM*3700 [0.50] Experiential Learning and Language

Students with no previous German will begin in GERM*1100.

Students with previous studies in German will begin at an appropriate level after placement by the Head of German Studies and may take more advanced GERM courses to complete the 2.50 credits.

Certificate in Hospitality Studies

The Certificate in Hospitality Studies is offered online from the University of Guelph's School of Hospitality, Food and Tourism Management, Gordon S. Lang School of Business and Economics. It is comprised of five courses taken via distance education and is designed to provide an overview of the hospitality industry, an understanding of human resources management principles and financial management skills. It is perfect for individuals needing additional formal education to assume greater management responsibilities.

The Certificate requires the five courses listed below:

Required Courses
ACCT*2230*DE [0.50] Management Accounting
HROB*2060*DE [0.50] Individuals and Groups in Organizations
HROB*2290*DE [0.50] Human Resources Management
HTM*2030*DE [0.50] Control Systems in the Hospitality Industry
MGMT*2150*DE [0.50] Introduction to Canadian Business Management

For more information, please visit the website at: http://www.hospitalitystudies.com

Certificate in Leadership

The Certificate in Leadership is offered by the University of Guelph through the Gordon S. Lang School of Business and Economics. This certificate program allows undergraduate students to complete both their degree program and the certificate concurrently. As well, the certificate is available to students in the Open Learning program.

The program focuses on new leadership models and practical applications in a variety of occupational settings. 2.50 credits are required in addition to 120 hours of leadership practice. Students will develop an historical and theoretical understanding of leadership with particular emphasis on contemporary theories, models and research.

For more information, please visit the website at: http://www.leadershipcertificate.com

Required
HROB*2010*DE [0.50] Foundations of Leadership
HROB*4010*DE [0.50] Leadership Certificate Capstone

Ethics Course Requirement (Select 0.50 credits)
PHIL*2120 [0.50] Ethics
PHIL*2600 [0.50] Business and Professional Ethics
POLS*2440 [0.50] Corruption, Scandal and Political Ethics

Electives (Select 1.00 credits)
EDRD*3140 [0.50] Organizational Communication
EDRD*3160 [0.50] International Communication
EDRD*4120 [0.50] Leadership Development in Small Organizations
HROB*2090 [0.50] Individuals and Groups in Organizations
HROB*2290 [0.50] Human Resources Management
MGMT*2150 [0.50] Introduction to Canadian Business Management [B. Comm students may not take this course for credit in their degree program.]

PHIL*2100 [0.50] Critical Thinking
POLS*2250 [0.50] Public Administration and Governance

Note: Students enrolled in the Leadership and Organizational Management major are not eligible for this certificate.
Certificate in Organic Agriculture

The Certificate in Organic Agriculture provides students with an interdisciplinary understanding of organic agricultural systems in the broader context of societal needs and developments. This broad perspective will enable students to investigate how societal changes shape the agriculture and food value chain in general and with regard to specific requirements, such as certification of organic agricultural and food production practices and standards. This certificate will require the completion of 2.50 credits: 1.50 credits of required courses, 1.00 credits from restricted electives.

Required Courses
OAGR*2070
OAGR*4180

Restricted Electives:
Students should note that some restricted electives require other courses not included among the required courses for the certificate as prerequisites. Further, some restricted elective courses may be priority access courses or restricted to certain programs or majors. Students should thus consult the most recent undergraduate calendar for specific requirements.

Students must select 1.00 credits of restricted electives from any of the following lists:

Soils:
AGR*2320 [0.50] Soils in Agroecosystems
ENVS*2060 [0.50] Soil Science
ENVS*3310 [0.50] Soil Biodiversity and Ecosystem Function

Animal and Plant Production:
ANSC*1210 [1.00] Principles of Animal Care and Welfare
ENVS*4100 [0.50] Integrated Management of Invasive Insect Pests
HORT*3350 [0.50] Vegetable Production
OAGR*4050 [1.00] Design of Organic Production Systems
PBIO*4070 [0.50] Biological and Cultural Control of Plant Diseases

Society and Sustainability:
EDRD*3400 [0.50] Sustainable Communities
ENVS*2070 [0.50] Environmental Perspectives and Choice
ENVS*2130 [0.50] Eating Sustainably in Ontario
GEOG*3320 [0.50] Food Systems: Issues in Security and Sustainability
SOC*2080 [0.50] Rural Sociology

Certificate in Public Policy and Administration

The five-course Certificate in Public Policy and Administration is designed to provide a solid base in key concepts and foundations of Canadian government, policy, and administration by bringing together a number of Canadian political science and public policy courses. This certificate will be of interest to individuals currently working or seeking employment in the public sector or quasi-public sector as well as undergraduate students. All six courses in this certificate are also available in distance education format and to earn the Certificate, students will be required to successfully complete five of the six courses (2.50 credits) as follows:

Required Courses
POLS*1400*DE [0.50] Issues in Canadian Politics
POLS*2250*DE [0.50] Public Administration and Governance
POLS*3250*DE [0.50] Public Policy: Challenges and Prospects
POLS*3370*DE [0.50] Environmental Politics and Governance
POLS*3440*DE [0.50] Corruption, Scandal and Political Ethics
SED*4400 [0.50] Urban Public Policy

Students who wish to enrol in the Certificate in Public Policy and Administration should contact the Open Learning program Counsellor at Open Learning and Educational Support (ext. 56050.)

Certificate in Spanish Language and Culture

The Certificate in Spanish Language and Culture provides students with an intermediate level (B1) of competency in the Spanish language and awareness of the cultures of various Spanish-speaking countries of the world.

A minimum of 2.50 credits is required, including:

Required Courses
SPAN*1100 [0.50] Introductory Spanish I
SPAN*1110 [0.50] Introductory Spanish II
SPAN*2000 [0.50] Intermediate Spanish I
SPAN*2010 [0.50] Intermediate Spanish II
SPAN*2040 [0.50] Culture of Spain
SPAN*2990 [0.50] Hispanic Literary Studies
SPAN*3080 [0.50] Spanish American Culture
SPAN*3240 [0.50] Topics in Hispanic Linguistics
SPAN*3500 [0.50] Advanced Spanish I

Students with no previous Spanish will begin in SPAN*1100.

Certificate in Public Policy and Administration

Students with previous studies in Spanish will begin at an appropriate level after placement by the Head of Spanish and Hispanic Studies and may take more advanced courses to complete the 2.50 credits.

Diploma in Applied Statistics

The Diploma in Applied Statistics is a program offered by the Department of Mathematics and Statistics, which seeks to give students of the Applied Sciences a technical competency in the use and application of Statistics.

The program is intended mainly for those whose primary area of expertise is not in Statistics, but who feel the need to be able to use modern statistical techniques. This program seeks to fill a need of scientists to reach a useful level of competency in the use of statistical methodology.

Diploma Requirements

The program consists of 5.00 credits chosen from the following list. It is important to take into account the necessary prerequisites when determining the sequence in which the courses are taken. Consult an advisor from the department for assistance.

MATH*1160 [0.50] Introduction to Calculus I
MATH*2040 [0.50] Calculus I
STAT*2050 [0.50] Statistics I
STAT*3100 [0.50] Introduction to Probability Theory
STAT*3110 [0.50] Introduction to Mathematical Statistics I
STAT*3120 [0.50] Experimental Design
STAT*3240 [0.50] Applied Regression Analysis
STAT*3320 [0.50] Sampling Theory with Applications
STAT*3510 [0.50] Environmental Risk Assessment
STAT*4050 [0.50] Topics in Applied Statistics I
STAT*4060 [0.50] Topics in Applied Statistics II
STAT*4150 [0.50] Topics in Applied Statistics III
STAT*4350 [0.50] Applied Multivariate Statistical Methods
STAT*4360 [0.50] Applied Time Series Analysis

Co-operative Education

Co-operative Education (Co-op), constitutes part of the student’s formal education and is available in over 35 majors for students. A form of work integrated learning, Co-op is a model of education that integrates a student’s academic learning with periods of paid workplace learning in fields relevant to the student’s academic and personal/professional goals. The academic and work schedules will vary with degree program and major. The first co-op work term is scheduled after the third or fourth academic semester, providing an academic foundation on which to build the work experience.

Each work term is developed in collaboration with the employer and is approved by the institution as a suitable learning environment. Students participate in a competitive employment process to secure an approved co-op work term that is relevant to the student’s area of academic study. COOP*1100 – Introduction to Co-operative Education, a mandatory, non-credit course, is a prerequisite for the first work term and prepares the student for the employment process.

The student’s performance in the workplace is supervised and evaluated by the student’s employer using the Work Performance Evaluation tool. The student’s progress during the work term is also monitored by Co-operative Education & Career Services (CECS), which may include an official site visit during the co-op work term and a review of the student’s official Learning Goals. A Co-op Work Term Report is required for each work term and is graded by an assigned Co-op Faculty Advisor. All evaluation grades will appear on the student’s official transcript.

The University of Guelph Co-operative Education program is accredited by the Co-operative Education and Work Integrated Learning Canada (CEWIL), therefore standardized guidelines regarding co-op work terms will be followed at all times.

Course requirements and academic/work sequences for specific majors are listed under the appropriate degree program in Chapter X of the Undergraduate Calendar.

In addition to Co-operative Education, CECS supports, trains and leads students and alumni as they make career and further education planning decisions. Successful students connect with CECS early in their academic career and take full advantage of the career and further education planning services offered. CECS helps students to discern “what to do with their degree”. As well, the CECS job posting service, Recruit Guelph, provides online job postings including full-time, part-time, contract, seasonal, summer and internships. Job & Career Services and employer networking events also provide exposure to the working world. Please refer to http://www.recruitguelph.ca/cecs/ for more information.

Co-operative Education Guidelines and Procedures

The following guidelines and procedures support the implementation of the “Policy on Co-operative Education Programming in Undergraduate Degree Programs”, approved by Senate on June 4, 2012. In the event of a discrepancy between the Policy and these Guidelines, the Policy will apply.

The following definitions shall apply in these guidelines and procedures:

Co-operative Education (Co-op), constitutes part of the student’s formal education and is available in over 35 majors for students. A form of work integrated learning, Co-op is a model of education that integrates a student’s academic learning with periods of paid workplace learning in fields relevant to the student’s academic and personal/professional goals. The academic and work schedules will vary with degree program and major. The first co-op work term is scheduled after the third or fourth academic semester, providing an academic foundation on which to build the work experience.

Each work term is developed in collaboration with the employer and is approved by the institution as a suitable learning environment. Students participate in a competitive employment process to secure an approved co-op work term that is relevant to the student’s area of academic study. COOP*1100 – Introduction to Co-operative Education, a mandatory, non-credit course, is a prerequisite for the first work term and prepares the student for the employment process.

The student’s performance in the workplace is supervised and evaluated by the student’s employer using the Work Performance Evaluation tool. The student’s progress during the work term is also monitored by Co-operative Education & Career Services (CECS), which may include an official site visit during the co-op work term and a review of the student’s official Learning Goals. A Co-op Work Term Report is required for each work term and is graded by an assigned Co-op Faculty Advisor. All evaluation grades will appear on the student’s official transcript.

The University of Guelph Co-operative Education program is accredited by the Co-operative Education and Work Integrated Learning Canada (CEWIL), therefore standardized guidelines regarding co-op work terms will be followed at all times.

Course requirements and academic/work sequences for specific majors are listed under the appropriate degree program in Chapter X of the Undergraduate Calendar.

In addition to Co-operative Education, CECS supports, trains and leads students and alumni as they make career and further education planning decisions. Successful students connect with CECS early in their academic career and take full advantage of the career and further education planning services offered. CECS helps students to discern “what to do with their degree”. As well, the CECS job posting service, Recruit Guelph, provides online job postings including full-time, part-time, contract, seasonal, summer and internships. Job & Career Services and employer networking events also provide exposure to the working world. Please refer to http://www.recruitguelph.ca/cecs/ for more information.

Co-operative Education Guidelines and Procedures

The following guidelines and procedures support the implementation of the “Policy on Co-operative Education Programming in Undergraduate Degree Programs”, approved by Senate on June 4, 2012. In the event of a discrepancy between the Policy and these Guidelines, the Policy will apply.

The following definitions shall apply in these guidelines and procedures:
• “Co-operative Education” is defined by the University of Guelph as a collaborative partnership between the University and workplace employers who share a commitment to the learning objectives and outcomes of the co-operative education program as expressed through experiential education opportunities and the integration of workplace and academic learning.

• “Co-op Program” (Co-operative Education Programming): Co-op education programming is offered in two distinct formats, as defined by CECS:
  i. “Co-op Option” (Co-operative Education Option): A co-op option may be offered within an established degree program and major. The Schedule of Studies includes semesters of academic study sequenced with semesters of on-site approved paid work terms.
  ii. “Co-op Internship” (Co-operative Education Internship) is defined as an on-site approved paid work experiences, normally 12 to 16 months in length commencing once 50% of the academic program is completed.

• “CECS” means the Co-operative Education & Career Services department at the University of Guelph. CECS is the unit designated to coordinate and support co-operative education programming by providing administrative assistance to co-op students, co-op employers, and co-op faculty advisors.

• “Co-op Co-ordinator” means the staff person assigned by CECS to provide support for a co-op education program through securing appropriate work term opportunities, providing orientation, advice and guidance to co-op students, and, in partnership with the Co-op Employer, monitoring student progress over the co-op work term.

• “Co-op Work Term” is defined as the designated period of time that a co-op student is engaged in an on-site approved paid work experience.

• “Co-op Employer” means the designated supervisor of a student who is participating in a co-op work term.

• “Work Term Report” is a report written by the co-op student following the completion of a Co-op Work Term and submitted to the Co-op Faculty Advisor for evaluation.

• “Work Term Performance Evaluation” is the formal evaluation of the student by the Co-op employer upon completion of the Co-op Work Term.

• “Co-op Faculty Advisor” is defined as the faculty member assigned by the department or school to provide academic advice and guidance to students enrolled in the co-op program, provide advice and guidelines on the development of the student’s Work Term Report, and evaluates the student’s Work Term Report.

• “Co-op Certification” is the official recognition of a co-op student’s satisfactory completion of all co-operative education requirements and graduation of their program, whereby they are awarded a co-operative education certificate.

Guidelines for the Establishment of Co-op Programs:

Co-operative Education Options shall be established according to the criteria listed under section 6.2 of the Policy on Co-operative Education Programming in Undergraduate Degree Programs at the University of Guelph. The roles and responsibilities of the co-operative education program partners are outlined under the Co-operative Education Programs in Chapter 10 Degree Programs.

Schedule of Studies

a. Every Co-op Option Schedule of Studies shall include the following features:

• A minimum of three Co-op Work Terms to a maximum of five Co-op Work Terms shall be sequenced within the Schedule of Studies;
• At least one Co-op Work Term shall occur in each of the Summer, Fall, and Winter semesters;
• No more than two Co-op Work Terms shall commence in a Summer semester;
• The first Co-op Work Term shall be scheduled no sooner than the second Winter semester of the program;
• No more than five full-time academic semesters shall be completed before the first Co-op Work Term;
• The Co-op Schedule of Studies shall not finish with a Co-op Work Term semester;
• The Schedule of Studies for a Co-op Option shall not exceed eight academic semesters, a schedule that is no longer than five years;
• At least thirty percent of the Schedule of Studies for the Co-op Option shall be comprised of semesters in Work Terms;
• It is the responsibility of the academic department in conjunction with CECS to design the Co-op Option Schedule of Studies taking into account that sufficient and appropriate courses are offered in the academic semesters on campus so that Co-op students are available year-round to employers participating in the program.

b. Co-op Internships:

• Co-op Internships normally commence once 50% of the academic program is complete and are 12 to 16 months in length.

c. The work term requirements:

• Each work term is developed and/or approved by CECS as a suitable learning opportunity;
• The student is engaged in productive work rather than merely observing;
• The student receives remuneration for the work performed;

• Work term opportunities without traditional remuneration must be approved by CECS;
• The student’s progress on the work term is monitored by CECS;
• The student’s performance on the job is supervised and formally evaluated by the student’s co-operative employer;
• Student’s must complete a work term report and satisfactorily pass the academic requirements governing this assessment.

Admissions

a. Normally the minimum admission average required for students to be considered for admission to a Co-op Option is 80%. Exact cut-offs are determined on the basis on the quantity and quality of applications received and the number of places available in the program. Students not admitted to co-op will be automatically considered for the regular program. The number of admission offers to the Co-op Option will depend upon the capacity determined each year by the Co-operative Program Co-ordinating Committee.

b. University of Guelph students and external students to the University may be admitted for transfer to a Co-op Option if there is capacity available in the specified program. The minimum admissions average for internal transfer is 70% cumulative average in the first two full time semesters. Other conditions and application deadlines may apply. Students should consult the Program Counsellor for information on internal transfer.

Continuation of Study

a. It is mandatory that co-op students be registered full-time for the duration of their program as outlined in the schedule of studies listed in the Undergraduate Calendar.

b. Students are required to meet a continuation requirement at the end of semester two. Students will be allowed to continue in the co-op program only if their cumulative average is 70% or higher after their first two full-time academic semesters.

c. Students are required to complete and pass the mandatory Introduction to Co-operative Education (COOP *1100) non-credit course as the pre-requisite for the first employment process.

d. Students are required to follow the academic and work sequence as outlined in the Undergraduate Calendar.

e. Students who receive a Marginal work performance evaluation will be required to meet with their Co-op Co-ordinator. Students who receive two Marginal work performance evaluations will be withdrawn from co-op and transferred to the regular academic program. The grade as well as the phrase “Req to Withdraw from Co-op” will appear on the Official Transcript.

f. A student who receives an Unsatisfactory work term report will be required to withdraw from co-op. The grade as well as the phrase “Req to Withdraw from Co-op” will appear on the Official Transcript.

g. A student who does not complete and submit the Work Term Report by the 5th class day of the next semester may not register in the following work term.

h. A student on academic probation shall not be eligible to participate in the Work Term process and will not be eligible to commence a Co-op Work Term.

i. The co-op employment process is competitive and while CECS makes every effort to assist students in gaining employment, there is no guarantee that every student will become employed through the employment process.

Graduation Requirements

Students are eligible to graduate with the “Co-op Certification” if they meet the following conditions:

a. Meet the academic conditions for graduation for their degree program as outlined in the Undergraduate Calendar.

b. Receive evaluations of “Good” or higher in all but one of the Work Performance Evaluations.

c. Receive evaluations of “Satisfactory” or higher in all Work Report Evaluations.

Students wanting to graduate with less than the required number of work terms must contact their Co-op Co-ordinator with the request and it will be brought to the Director CECS for final approval.

Students who do not achieve the requirements for continuation of study or graduation in the co-op program may appeal the decision (see Chapter VIII, Academic Consideration).

Roles and Responsibilities of Co-operative Education Program Partners

The University of Guelph’s co-operative education program requires a collaborative approach that engages all partners in the process. The success of the co-op programs at Guelph is dependent upon a commitment by all the partners involved.

Students

Student success in a co-op option requires commitment, students are required to read and understand the Policy Agreement for Undergraduate Student Involvement in Co-operative Education.
There is no guarantee that all students enrolled in co-op will have a work term. They must take responsibility for the employment process. This includes:

- Meeting the co-op continuation of study requirements;
- Successfully completing the COOP*1100 preparatory course; and,
- Understanding the competitiveness of the co-op application process and their responsibilities within the process.

Students must also take responsibility for success in the workplace. As such, students must:

- Adequately prepare for the work term and represent themselves and the University in the workplace;
- Set learning goals with the supervisor early in the term and work toward achieving those goals;
- Request a formal performance evaluation at the end of the term;
- Prepare a work term report for the Co-op Faculty Advisor;
- Successfully complete the requirements of the work terms; and
- Inform CECS on matters affecting their status.

The Academic Department

The Academic Department is responsible for all academic components of the co-op program including the offering of courses to support the co-op option and the evaluation of the co-op work term report. A Co-op Faculty Advisor is provided for each co-op program.

The role of the Co-op Faculty Advisor is to support the student on the academic requirements of the program. The responsibilities of the Co-op Faculty Advisor are to:

- Assist students in academic/work sequences and course selection;
- Provide detailed guidelines on the writing and marking of work term reports;
- Advise the student of appropriate work term report topics, supporting the process, grading of the work report and follow-up discussion with the student; and
- Undertake administrative tasks in support of the educational program, including management of the unit’s co-op program, supporting the development of materials about the program (where required), and establishing procedures for the co-op option within the department.

Co-operative Education & Career Services (CECS)

The role of CECS is to support all of the administrative functions related to the work term experience. Responsibilities of CECS include:

- Following the required operational guidelines as an accredited program of the Co-operative Education and Work Integrated Learning Canada (CEWIL);
- Preparing students for the co-op experience;
- Co-ordinating job development relevant to the academic curriculum and facilitating the employment process;
- Ensuring the quality of the job development effort;
- Providing all the administrative support required for the smooth functioning of the university’s co-operative education program;
- Operating the competitive employment processes including co-op interviews and employer information sessions, panels and informational interviews; Maintaining all employer, department and student data;
- Processing all clerical and administrative matters relating to the relationship between employer and institution;
- Building employer relationships and provide students with a range of suitable employment opportunities, and working closely in conjunction with the academic unit and Alumni Affairs and Development;
- Offering the COOP *1100 Introduction to Co-operative Education course the semester prior to the student employment process;
- Providing student support for resume, cover letter and interview preparation as well as career guidance where needed;
- Ensuring that the employer maintains the appropriate educational quality in the work term experience provided to the student;
- Working with the Registrar to ensure a reasonable number of students are admitted into the program;
- Ensuring that the academic/work program schedules provide year round availability of work terms to meet employer needs; and
- Assigning Co-op Co-ordinators to co-operative education options.

Co-op Co-ordinator

The role of the Co-op Co-ordinator is to work within specific programs to support the work-term process. Responsibilities of the Co-op Co-ordinator are to:

- Develop jobs in specific discipline areas;
- Advise students in regard to their activities in the employment process and on the work term;
- Market the co-op program to employers and obtaining work term commitments;
- Prepare co-op students for their involvement in co-operative education, and educate students concerning employer and performance expectations;
- Actively monitor the work term maintaining contact with the student during the work term;
- Be available any time during the work term to respond to student or employer inquiries;
- Conduct a work term site visit with the student and supervisor;
- Conduct pre- and post-work term student advisement and debriefing;
- Manage the student's file and ensuring complete institutional records on each student;
- Undertake administrative tasks in support of the co-op program, including consultation with academic units on their co-op offering, consultation with Co-op Faculty Advisor on policy and procedure aspects of the program; and
- Approve special situations where students may complete a work term without traditional remuneration.

Co-op Program Coordinating Committee (CPCC)

The role of the CPCC is to provide administrative oversight and advice as it relates to the University’s co-op programs. Responsibilities of CPCC include:

- Ensure that all co-op programs conform to the established policy and standard practices;
- Co-ordinate co-op option schedule of studies to support the maximum availability of students in all three semesters;
- Review new program proposals to confirm that sufficient resources are available to mount a quality co-op program, including the assignment of a Co-op Coordinator and Co-op Faculty Advisor for each stream; and
- Monitor co-op programs to support high quality program delivery.

Employer

Good quality employers who understand the educational focus of the co-op programs are critical to the program. Responsibilities of the employer are to:

- Provide co-op work term job opportunities that meet the university's educational objectives;
- Provide the university with an accurate job description along with any available company information;
- Conduct interviews and select the best candidate;
- Pay competitive wages in accordance with the student’s work term level and academic level;
- Provide safe employment including WSIB and liability insurance coverage for the duration of the employment period; and
- Comply with the Provincial Employment Standards Act.

During the work term:

- Orient the student to the organization, workplace protocols and the job during the first few weeks of the work term;
- Supervise the student and provide guidance when the student is setting learning goals at the start of the work term with a review mid-term and at the completion of the work term;
- Provide performance feedback to the student throughout the term and keeping the Co-op Coordinator current on any changes in the student’s performance;
- Meet with the Co-op Co-ordinator during the work term visit and providing feedback concerning the student’s performance and if there are concerns maintaining communication with the Co-op Co-ordinator;
- Provide career information and guidance as appropriate;
- Complete a work term performance evaluation form and exit interview for the student at the conclusion of the work term; and
- Assist the student with the selection of a topic for a work term report and providing comments on the final work term report if appropriate.

Distance Education

Online learning offers students a contemporary means through which the University continues its tradition of outreach and open learning opportunities. Online degree-credit courses are offered by Open Learning and Educational Support (OpenEd) in collaboration with academic departments and schools. This option provides students the opportunity to create a flexible study schedule, acquire credits while away on summer break or a co-op placement, and/or choose to learn in an interactive online course environment.

Online courses are designed to foster interaction between students, their instructor and the content. Students can expect to engage in activities, such as online discussions and individual and group assignments, using a variety of technologies and resources.

Each semester, the University offers a wide range of online degree-credit courses from a variety of disciplines. Visit the OpenEd website for a list of available online courses and more information about learning online. Please note that University of Guelph degree students must register for online courses through WebAdvisor by selecting the DB01 section.
General Studies

The objective of the General Studies program is to provide mature students with the opportunity to take university courses before registering in a specific degree program or to take university courses for continued learning with no immediate intention of registering in a degree program. The General Studies program does not lead towards a specific undergraduate degree at the University of Guelph.

Academic Counselling

General Studies students can obtain counselling for selecting courses, and planning their future program from the B.A.S. Counselling Office located in Room 128A MacKinnon Building. Prospective students should contact the Admissions Section of the Office of Registrarial Services.

Financial Assistance

Students registered in 3 or more courses of the General Studies program maybe eligible to apply to the Ontario Student Assistance Program (OSAP) if an Ontario resident. Students who are residents of other provinces must apply to their home province for financial assistance. General Studies students maybe eligible to apply for OSAP assistance for a maximum of two semesters. General Studies students who transfer to a degree program may continue to apply for OSAP.

Schedule of Studies

1. Students may take any undergraduate course offered by the University, as long as any stated prerequisites are met or the approval of the instructor is obtained.
2. Students may take Associate Diploma courses with the approval of the Director of the Associate Diploma program.
3. Students will not normally be eligible to continue in the General Studies program after enrolment in 20 courses.
4. The grade assigned for each course will become part of the student's University academic record.
5. Students who register in the General Studies program and who subsequently apply for transfer to a degree or diploma program, will be required to meet admission requirements for that program, and credit granted for courses taken in the General Studies program will be subject to the regulations pertaining to that program.

Tuition Fees

Students are referred to Chapter VI - Schedule of Fees of the Undergraduate Calendar.

Undergraduate Regulations

Students are referred to Chapter VIII - Undergraduate Degree Regulations for additional information regarding registration, course selection, withdrawal from study, continuation of study, examination policy and requests for academic consideration.

Graduate Studies

The University of Guelph offers graduate programs in most departments and schools. These post-baccalaureate programs offer opportunities for personal, academic and professional growth. Students with a 70% average or higher should consider and investigate professional development, eventual application to a degree program, or to satisfy educational requirements for that program, and credit granted for courses taken in the General Studies program will be subject to the regulations pertaining to that program.

The following list of specializations is not intended to represent all the university's interdisciplinary initiatives. Instead it identifies those specializations that involve a significant degree of collaboration between departments or colleges. For further details, refer to the appropriate undergraduate degree program information in Chapter IX.

Bachelor of Arts

Criminal Justice and Public Policy
Environmental Governance
European Studies
International Development

Bachelor of Arts and Sciences

The University of Guelph offers an 8 semester (20.00 credits) honours program leading to a Bachelor of Arts and Sciences (B.A.S.) degree.

The Bachelor of Arts & Sciences program is designed for students who are motivated equally by the study of Arts/Social Sciences and the Sciences, and who find challenge and satisfaction in testing the traditional boundaries of study through undergraduate level interdisciplinary work. The program meets these objectives through a unique structure that accredits students in an Arts/Social Sciences core, a Sciences core, a Subject Area core of interdisciplinary humanities and sciences courses (ASCI*), and a minor in each of the Arts/Social Sciences and the Sciences (see below for choices of minors). The structure of the program ensures disciplinary rigour and breadth through completion of core requirements for a B.A.S. degree, concentration in two distinct minors, and concentration of learning in an academic cohort of B.A.S. students through the interdisciplinary ASCI courses in the B.A.S. core. This core is open only to students in the B.A.S. program. For more information please see: [http://www.uoguelph.ca/bas/](http://www.uoguelph.ca/bas/)

Bachelor of Commerce

Agricultural Business
Hotel and Food Administration
Human Resources Management
Management Economics in Industry & Finance
Marketing Management
Public Management
Tourism Management

Bachelor of Science in Environmental Sciences

Open Learning

The University of Guelph serves the learning needs of people from a variety of age groups whose educational requirements may not match the program structure or services available through full-time undergraduate study. The adoption of the philosophy of lifelong learning, changes in the demographic characteristics of our communities, the explosion of new knowledge, and the effect of rapid technological advances on professional competence are major factors underlying the University's commitment towards alternative approaches to providing education through open learning.

Open Learning and Educational Support (OpenEd)

Open Learning and Educational Support (OpenEd) is an integral part of the University of Guelph’s learner centred and research-intensive mission.

As leaders in education, OpenEd creates innovative and relevant educational opportunities that meet the learning needs of a local and international audience. OpenEd is guided by learner-centred principles that are reflected in its diverse programs and rich learning experiences for traditional and lifelong learners. OpenEd intentionally integrates pedagogy with technology in the design, development and delivery of its educational programs. Through research and collaboration, it engages in scholarship to advance the teaching and learning mandate of the University of Guelph.

OpenEd supports University of Guelph educators and programs to improve curriculum, teaching practices, and the quality of student learning outcomes.

In partnership with academic departments, OpenEd works with faculty to create and maintain interactive and engaging online learning experiences using instructional design best practices, evidence-based pedagogical approaches, and appropriate educational technologies that support identified learning outcomes

Additionally, OpenEd engages in a wide range of activities to develop, administer, and support educational technology at the institution, both in the classroom as well as in the online environment.

The Open Learning program

The Open Learning program is an open-admission program that provides anyone, regardless of their academic background, with an opportunity to register for University of Guelph online degree-credit courses.

Students may choose to register in the Open Learning program for personal enrichment, professional development, eventual application to a degree program, or to satisfy requirements from another post-secondary institution.

The University of Guelph offers an 8 semester (20.00 credits) honours program leading to a Bachelor of Arts and Sciences (B.A.S.) degree.

The Bachelor of Arts & Sciences program is designed for students who are motivated equally by the study of Arts/Social Sciences and the Sciences, and who find challenge and satisfaction in testing the traditional boundaries of study through undergraduate level interdisciplinary work. The program meets these objectives through a unique structure that accredits students in an Arts/Social Sciences core, a Sciences core, a Subject Area core of interdisciplinary humanities and sciences courses (ASCI*), and a minor in each of the Arts/Social Sciences and the Sciences (see below for choices of minors). The structure of the program ensures disciplinary rigour and breadth through completion of core requirements for a B.A.S. degree, concentration in two distinct minors, and concentration of learning in an academic cohort of B.A.S. students through the interdisciplinary ASCI courses in the B.A.S. core. This core is open only to students in the B.A.S. program. For more information please see: [http://www.uoguelph.ca/bas/](http://www.uoguelph.ca/bas/)

Open Ed
Open Learning program students can expect to have the same workload, assignments and examinations as those in a degree program. Upon successful course completion, they will receive the same credit weight as students in a degree program.

Visit the page on the OpenEd website for more information.

**Continuing Education Option**

Students who are not interested in receiving credit for courses may register as continuing education students. Learners who select this option are not required to complete assignments or related exams.

Visit the OpenEd website for more information.

**Guaranteed Admission to a BA Program**

Open Learning program students who have no previous post-secondary experience and have completed four courses (2.00 credits) with a 70% minimum cumulative average may transfer into a BA program at the University of Guelph.

Applicants are advised to complete two courses (1.00 credit) from the College of Arts and two courses (1.00 credit) in the Social Sciences.

Visit the Open Learning and Educational Support website for more information about the Guaranteed Admission Pathway.

**Guaranteed Admission to the B.Comm. Program**

Open Learning program students with no previous post-secondary education will be offered guaranteed admission to the Bachelor of Commerce (B.Comm.) degree program under the following conditions.

1. Applicants must satisfy the English proficiency requirements (see the Undergraduate Calendar, Chapter IV Admission, English Proficiency).
2. Successful completion of four degree-level courses (2.00 credits) with a minimum cumulative average of 70% in at most, six course (3.00 credits) attempts. The four courses (2.00 credits) used in the calculation of the cumulative average will include any degree-level courses used to meet the English and mathematics requirements and must satisfy the following:
   a. at least 1.00 credits must be from arts and social sciences
   b. no more than 1.00 credits from mathematics and statistics combined may be used to calculate the cumulative average
3. Applicants must satisfy the following English and mathematics requirements:

   **English Requirement**
   A grade of 75% or higher in English 12U or the successful completion of one course (0.50 credits) from:
   - ENGL*1030
   - ENGL*1200
   - GEOG*1220
   - POLS*1400
   - SOC*1100
   - WMST*1000

   **Mathematics Requirement**
   A grade of 75% or higher in the 12U mathematics course(s) required for the applicant's intended major or the successful completion of MATH*1030.

Visit the Open Learning and Educational Support website for more information about the Guaranteed Admission Pathway.

**Open Learning program Certificates and Diplomas**

Certificate in Business
Certificate in Communication Process: Bridging Theory and Practice
Certificate in Environmental Citizenship
Certificate in Environmental Conservation
Certificate in Food Science
Certificate in Hospitality Studies
Certificate in Leadership
Certificate in Public Policy and Administration

Refer to Certificates and Diplomas in this section for descriptions or visit the Certificate/Diploma page on the OpenEd Student Portal.

**Open Learning program Courses**

Please refer to Distance Education in this section for courses offered through the Open Learning program.

Visit the OpenEd website for technical and material requirements.

**Open Learning and Educational Support Scholarships/Bursaries**

**Open Bursary**

This bursary has been established by faculty, staff and friends of Open Learning and Educational Support (OpenEd). The funds are intended to provide support for non-degree students who are enrolled in the Open Learning program (courses, certificates and diplomas) and in need of financial assistance. Applicants must be Canadian citizens or permanent residents who can demonstrate significant financial need. Visit the Financial Assistance page on the OpenEd website for more information.

**Equine Science Certificate Scholarship**

This scholarship covers the cost of tuition for one course in the Equine Science Certificate program. The scholarship is available to Open Learning program students who have completed two courses in the program with a minimum cumulative average of 80%. Applications must be sent to Equine Guelph by February 12 each year. The application must include a short essay (maximum of two pages) that outlines the value of the program. Students may receive the scholarship only once.

**Virginia L. Gray Memorial Bursary**

Virginia L. Gray dedicated 38 years of her life to the University community until her retirement in 2007 as Director, Office of Open Learning. Virginia’s innovative approach to education positioned the University of Guelph to become an international leader in continuing and distance education. Virginia was committed to eliminating barriers to education and to supporting students who had a desire to advance their academic and career goals through education. Family, friends and colleagues of Virginia Gray have established and contributed to the Virginia L. Gray Memorial Bursary as a tribute to her exemplary work. Students interested in enrolling in an Open Learning and Educational Support continuing education or Open Learning program course are eligible to apply. Applicants must be Canadian citizens or Permanent residents. Applications will be reviewed on January 30th and July 30th for upcoming course offerings. Applications must include a letter outlining financial need and academic goals, and must include supporting documentation. Students may receive the bursary only once. Visit the Financial Assistance page on the OpenEd website for more information.

**Prof. H.J. Malik Statistics Prize**

This $150 prize is provided by family, colleagues and friends in honour of H.J. Malik, Professor Emeritus in the Department of Mathematics and Statistics. Application is not required for this award. Open Learning program distance education students who have completed the course STAT*2060 - Statistics for Business Decisions with the highest attained grade over 80% in the previous year will automatically be considered for this award. Award consideration takes place in May, following the previous spring, fall or winter semesters.

**Distance Education**

Open Learning and Educational Support (OpenEd) facilitates the delivery of online degree-credit courses to students. Online courses provide students with a flexible alternative in course scheduling. OpenEd assists in course development and preparation and is the focal point of this activity by providing information, student support, and administration. Please refer to the Distance Education heading in this section for the listing of courses offered through the distance format.

Visit the OpenEd website for more information about distance education.

**Certificate in English Language Program**

The English Language Certificate Program is an intensive academic English program designed to prepare ELP students aged 18 and over for academic study at the undergraduate and graduate level. Classes in grammar, reading, writing, listening and speaking help students achieve the advanced level English skill needed to be successful in academic studies. Students who successfully complete the Advanced level earn the University of Guelph Certificate of English Proficiency, which meets the English proficiency requirements for entry into undergraduate and graduate studies at the University of Guelph and the University of Guelph-Humber. Applicants are encouraged to have an intermediate English skill level, and an academic goal to study at a university.

Students may also earn the Certificate of English Proficiency by completing the Integrated Admission Pathway, which provides students with the opportunity to earn undergraduate degree-level credits while developing their language skills in academic English courses. The pathway includes a combination of classroom-based and fully online degree course offerings and offers a range of student support.

Applicants are encouraged to have an intermediate English skill level, and an academic goal to study at a university.

To learn more, please visit the English Language Programs website.

Open Learning and Educational Support (OpenEd) facilitates the delivery of online degree-credit courses to students. Online courses provide students with a flexible alternative in course scheduling. OpenEd assists in course development and preparation and is the focal point of this activity by providing information, student support, and administration. Please refer to the Distance Education heading in this section for the listing of courses offered through the distance format.

Visit the OpenEd website for more information about distance education.

**Continuing Education**

Open Learning and Educational Support annually offers over 100 professional development programs, courses, conferences, and certificates in collaboration with academic departments and/or professional organizations. For detailed information on learning opportunities offered by OpenEd, please visit the Open Learning and Educational Support website.
Certificate in Creative Writing
If you are an aspiring writer looking to get serious about your craft, then the Creative Writing Certificate program is designed for you. Take advantage of an opportunity to explore a variety of genres, improve your writing, and develop the tools to master a significant writing project.

Our creative writing courses are designed to include extensive interaction that works best in a face-to-face learning environment. Classroom-based courses offer multiple opportunities for peer interaction and one-on-one instructor guidance. By participating in these courses, you will have a unique opportunity to meet and learn from a variety of talented Canadian writers and establish lifelong writing networks with your peers.

There are no admission requirements. Students can take one course or continue to complete the certificate. To complete the Creative Writing Certificate students are required to complete six courses. Two required courses, a choice of three electives, and the capstone project.

To learn more, please visit the Creative Writing Certificate website.

Certificate in Coaching for Leadership
Employee engagement and performance management are essential drivers in high performing organizations. The Coaching for Leadership program focuses on developing your leadership skills using the coach approach.

Courses will examine the necessary components of a coaching culture and assist in developing leadership skills in an online learning environment. Participants will learn about performance management and how to manage conflict to build high trust relationships. The program is focused on leadership development using coaching and communication to engage employees to achieve organizational excellence.

The program consists of four online courses. All courses in the program have been designed as independent courses and do not have to be completed in sequence. Each course is eight (8) weeks in duration resulting in approximately 30 contact hours. There are no formal admission requirements. The program however has been designed for senior leaders, managers, supervisors, human resource professionals, project managers and organizational consultants or anyone who is aspiring to be a leader. Participants can complete the certificate program within approximately one (1) year.

To learn more, please visit the Certificate in Coaching for Leadership website.

Certificate in Couple & Family Therapy Studies
The Certificate in Couple and Family Therapy Studies (CFTS) program is designed to provide specialized training in couple and/or professional development in the theory, concepts and practices that inform needs, problems, and changing patterns of couple and family relationships. The focus of the program is on clinical or direct client service. Systems theory is the primary, although not the only, theoretical orientation within the program.

Courses in the Certificate in Couple and Family Therapy Studies cover the theory, concepts, and approaches of couple and family therapy practice. These courses introduce the major theories and central concepts that form the foundations of couple, family, and marriage therapy. They focus on the historical development of systemic therapy and introduce several models of therapy, such as: Cognitive-Behavioural, Experiential, Bowenian, Contextual, Strategic, and many other models. A comprehensive analysis of the various models assists students in placing the various therapy tools into an integrated framework. The courses use a variety of teaching and learning methods to effectively translate theories into practical methods for contemporary therapists. Examples of active learning strategies utilized to promote student engagement include: case studies, small group discussions, small group work projects, activities that utilize movement (e.g., role-plays, fish bowl, etc.). Students should anticipate that many discussions and interactive activities require reflection and sharing from personal and/or professional experience with class members and the instructor.

While any course can be taken as a standalone for personal or professional development, the certificate program consists of three required courses and three elective courses that must be successfully completed within five years.

The certificate is provided in partnership with the Ontario Association for Marriage and Family Therapist.

To learn more, please visit the Certificate in Couple and Family Therapy Studies website.

Certificate in Creative Writing
If you are an aspiring writer looking to get serious about your craft, then the Creative Writing Certificate program is designed for you. Take advantage of an opportunity to explore a variety of genres, improve your writing, and develop the tools to master a significant writing project.

Our creative writing courses are designed to include extensive interaction that works best in a face-to-face learning environment. Classroom-based courses offer multiple opportunities for peer interaction and one-on-one instructor guidance. By participating in these courses, you will have a unique opportunity to meet and learn from a variety of talented Canadian writers and establish lifelong writing networks with your peers.

There are no admission requirements. Students can take one course or continue to complete the certificate. To complete the Creative Writing Certificate students are required to complete six courses. Two required courses, a choice of three electives, and the capstone project.

To learn more, please visit the Creative Writing Certificate website.

Certificate in Data Science
The online Data Science Certificate reviews and provides a solid understanding of data science and the role of the data scientist in the real-world environment. Participants will learn how to use data analytics, predictive analytics and big data tools to understand the basic technical concepts and challenges of Big Data. The program’s final course will include a capstone project that draws on skills gained from the curriculum to address a real-world problem.

Admission to the program requires an Undergraduate degree or College diploma, and successful completion of a basic Statistics course.

In order to receive your Data Science Certificate, you must complete the three online courses sequentially. The program can be completed within one year.

To learn more, please visit the Data Science Certificate website.

Certificate in Disability Management and Attendance Support
The Certificate in Disability Management and Attendance Support program provides students with the opportunity to explore concepts and utilize evidence-based best practices to advance their knowledge and skills in disability case management, attendance management, and employee support. Within each of these focuses, legal obligations and ethical responsibilities are explored.

Admission to the program requires an Undergraduate degree or College diploma, and successful completion of a basic Statistics course.

The program’s design utilizes a highly interactive learning approach, engaging students in case studies and real-life scenarios to provide a deeper analysis of the many approaches, roles, complexities, and challenges in the field and specific functions.

The certificate is provided in partnership with the Ontario Association of School Business Officials. To learn more, please visit the Certificate in Disability Management and Attendance Support website.

Certificate in English Language Program
The English Language Certificate Program is an intensive academic English program designed to prepare ELP students aged 18 and over for academic study at the undergraduate and graduate level. Classes in grammar, reading, writing, listening and speaking help students achieve the advanced level English skill needed to be successful in academic studies. Students who successfully complete the Advanced level earn the University of Guelph Certificate of English Proficiency, which meets the English proficiency requirements for entry into undergraduate and graduate studies at the University of Guelph and the University of Guelph-Humber. Applicants are encouraged to have an intermediate English skill level, and an academic goal to study at a university.

Students may also earn the Certificate of English proficiency by completing the Integrated Admission Pathway (IAP). The Integrated Admission Pathway (IAP) will allow academically qualified international students, who meet the University’s undergraduate admission requirements but have not yet achieved English language proficiency, to complete degree credit courses through the University’s Open Learning program while studying English language courses to achieve the Certificate of English proficiency granted by OpenEd. The pathway includes a combination of classroom-based and fully online degree course offerings and provides a range of student support.

Students with an IELTS 5.5 or TOEFL iBT 56 or equivalent and who satisfy the undergraduate admission requirements may be offered conditional admission to one of three-degree programs in this pathway:
• Bachelor of Arts (Economics)
• Bachelor of Science (Mathematical Science)
• Bachelor of Commerce (Undeclared)

Successful completion of the Integrated Admission Pathway requires:
• Completion of English Language courses with an overall average of 75% and no course average below 70%, equivalent to the ELCP Advanced Level and achievement of the Certificate of English Proficiency, which meets the University’s English proficiency requirements.
• Successful completion of all credit courses with a minimum 60% cumulative grade.

To learn more, please visit the website at: http://www.elpguelph.ca or contact Open Learning and Educational Support by email at info@OpenEd.uoguelph.ca or call 519-767-5000.

Certificate in Equine Business Management
The Certificate in Equine Business Management is designed for anyone interested in working in the administrative and management aspects of the equine industry. Learn how to develop marketing and business plans, create budgets and set up financial records, manage operations and establish yourself as a professional. Take the first step in gaining the skillset required for sustainable equine business success. The Certificate in Equine Business Management requires you to complete six courses.

This program is provided in partnership with Equine Guelph, the Centre for equine education and research at the University of Guelph.

To learn more, please visit the Equine Studies website.
Certificate in Equine Science
The Equine Science Certificate is designed to help you improve the management and welfare of horses in your care. The courses introduce you to research and evidence-based practice and are presented in a practical format, making it easy for you to directly apply what you have learned to the health and performance of your horse. This program is ideal for the horse owner. The Equine Science Certificate requires you to complete six courses successfully. All of the courses are completed online.

This program is provided in partnership with Equine Guelph, the Centre for equine education and research, at the University of Guelph.

To learn more, please visit the Equine Studies website.

Certificate in Equine Welfare
This program challenges you to consider welfare from the perspective of the horse. You will use an evidence-based approach to support your views for or against specific issues relating to equine management and gain an in-depth understanding of the Five Freedoms, a core concept in animal welfare. You will examine the science behind what is required to support sound management and welfare practices for horses in Canada and around the globe. The Equine Welfare Certificate will help you discover solutions to the behavior and health problems horses face because of our management practices.

This program is delivered in partnership with the Campbell Centre for the Study of Animal Welfare and Equine Guelph the Centre for equine education and research, at the University of Guelph.

The Equine Welfare Certificate requires you to complete six courses.

To learn more, please visit the Equine Studies website.

Certificate in Facilities Management
The Certificate in Facilities Management provides students with the knowledge, skills, and abilities required to manage and lead the Ontario School Board’s infrastructure in a way that meets legal requirements and regulating authorities' standards, ensures facility sustainability and creates green learning environments for students and communities, as well as engenders employee engagement.

The certificate is provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Certificate in Facilities Management website.

Certificate in Human Resources Management for School Board Administration
The Certificate in Human Resources Management for School Board Administration program is designed for Ontario school board professionals who wish to develop and/or enhance their knowledge, skills, and abilities in effective human resources management as it relates to the uniqueness of the school board environment. The curriculum reflects the current and relevant information, critical issues, and challenges facing human resources professionals within Ontario school boards.

There are no admission requirements. The certificate is achieved by successfully completing four different courses from within the program offerings.

The certificate is provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Certificate in Human Resources Management for School Board Administration website.

Certificate in Information and Communication Technology Management
The Certificate in Information and Communication Technology Management program is designed for information technology professionals who wish to develop their knowledge and skills in effective information technology management and enhance their leadership and management competencies. The program offers students a strategic overview of the management of information and technology challenges and opportunities in today’s work environment.

There are no admission requirements. The certificate is achieved by successfully completing four different courses from within the program offerings.

The certificate is provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Certificate in Information and Communication Technology Management website.

Certificate in Information Management, Privacy, and Access
The Certificate in Information Management, Privacy, and Access is designed to provide a comprehensive overview of the fundamentals of information management, privacy, and access as it relates to functions within Ontario school boards. Additionally, the program offers students a strategic overview of leadership within today’s IMPA environment. Students will gain a sound understanding of the legislation affecting information management, privacy, and access, developing the necessary skills to design and deliver effective IMPA programs, policies, and procedures.

There are no admission requirements. The certificate is achieved by successfully completing four different courses from within the program offerings.

The certificate is provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Certificate in Information and Communication Technology Management website.

Certificate in Knowledge Mobilization
The Certificate in Knowledge Mobilization is designed to develop participants' knowledge, skills, and values with respect to knowledge mobilization (KMb) and build capacity to select and apply KMb tools and techniques to move knowledge into action.

Addressing today's complex social, economic, health or environmental challenges calls for increased capacity to collaborate in finding and implementing innovative solutions. While a vast amount of knowledge is created every day, only a fraction of it is effectively mobilized - shared, used, and applied to inform real-life situations. This lack of knowledge transfer or exchange is contributing to a gap between research, policy and practice, which hinders social innovation and slows down progress. The Certificate in Knowledge Mobilization can help close this gap by providing participants with the skills and tools to enable the efficient and appropriate dissemination, uptake and application of knowledge.

The certificate consists of three (3) online courses, eight weeks in length.

The certificate is provided in partnership with the Community Engaged Scholarship Institute.

To learn more, please visit the Certificate in Knowledge Mobilization website.

Certificates in Laboratory Animal Medicine – Canada and United States
The Certificates in Laboratory Animal Medicine Canada and United States are designed to provide continuing education, and applied training and experience for licensed veterinarians working in the field of Laboratory Animal Medicine. Laboratory animal medicine is a broad discipline that encompasses all research animals used in science, including, but not limited to, use of rodents, rabbits, nonhuman primates, dogs, cats, agricultural species, fish, birds, wildlife, etc.

These programs are delivered in partnership with the Ontario Veterinary College.

To learn more, please visit the Certificate in Laboratory Animal Medicine-Canada website or the Certificate in Laboratory Animal Medicine–United States website.

Certificate in Pupil Transportation Management
The Certificate in Pupil Transportation Management provides a unique opportunity for school board transportation specialists and independent operators to develop and enhance their knowledge, skills, and abilities in effective transportation management. The curriculum reflects the current information, evidence-based best practices, issues, and challenges facing pupil transportation at Ontario school boards.

There are no admission requirements. The certificate is achieved by successfully completing four different courses from within the program offerings. The certificate is provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Certificate in Pupil Transportation Management website.

Certificate in Supply Chain Management for Public Procurement
The Certificate in Supply Chain Management for Public Procurement is designed to provide knowledge and skills required in supply chain management and applied in the broader public sector (e.g., school boards, hospitals, etc.). Students will develop a deeper understanding of the principles of supply chain management for public procurement and the critical issues currently facing the field (e.g. legislative and regulatory change, costing, risk), while advancing their skills in strategic sourcing decision-making, methods of procurement, managing the competitive bidding process, contracting, and managing vendor relationships from negotiation to dissolution.

There are no admission requirements. The program is currently comprised of five different courses, four of which must be successfully completed to earn the certificate.

The certificate is provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Certificate in Supply Chain Management for Public Procurement website.

Certificate in Turf Managers’ Short Course
The Turf Managers’ Short Course is an intensive four-week residential program designed to provide turf industry personnel with knowledge in all aspects of turf management and culture. Students will learn to interpret and integrate turfgrass agronomic information to design and implement turfgrass management strategies.

This program is delivered in partnership with the Guelph Turfgrass Institute.

To learn more please visit the Turf Managers’ Short Course Certificate website.
Diploma in Equine Studies
The Diploma in Equine Studies developed with Equine Guelph, brings the expertise of a world-class veterinary college to horse owners. You will explore topics like equine safety and management practices, environmental stewardship, equine behavior, nutrition, anatomy, health, and welfare in this comprehensive program. The diploma will guide and coach you to develop the core competencies required to be proficient in the field of HR.

To learn more, please visit the Equine Studies website.

Diploma in Human Resources Management
The Human Resources Management diploma program has been developed to provide you with the fundamental knowledge, skills and values to become a successful HR professional. The five required courses are: HR Strategy, HR Management, HR Development, Employee Relations, and Business Acumen. These courses are designed to provide you with the skills and knowledge needed to effectively manage people in any professional setting. The diploma is provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Diploma in Human Resources Management website.

Diploma in School Board Administration
The Diploma in School Board Administration (DSBA) is designed for Ontario school board professionals who wish to develop and enhance their skills and knowledge of the board's business operations and functions. The diploma is achieved by successfully completing six online required courses and four elective courses, currently classroom-based. The diploma provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Diploma in School Board Administration website.

DNA Barcoding Courses
Explore DNA Barcoding, PCR, next generation sequencing and environmental DNA (eDNA), to monitor biodiversity and obtain precise species identification, authentication and traceability through online courses developed by the Centre for Biodiversity Genomics. Gain an introduction to and history of DNA barcoding and its application as a standard for species identification. Metabarcoding reviews the state of the current technology and the suite of bioinformatics tools available for sequence analysis and data interpretation. Regulatory and forensic applications of DNA barcoding can trace and authenticate to the species level substitutes or counterfeits in traded commodities and pests. Standard operating procedures.

To learn more, please visit the DNA Barcoding website.

Online Equine Studies Certificate Programs
Equine Science Certificate
The Equine Science Certificate is designed to help you improve the management and welfare of horses in your care. The courses introduce you to research and evidence-based practice and are presented in a practical format, making it easy for you to directly apply what you have learned to the health and performance of your horse. This program is ideal for the horse owner. The Equine Science Certificate requires you to complete six courses successfully. All of the courses are completed online.

This program is provided in partnership with Equine Guelph, the Centre for equine education and research, at the University of Guelph.

To learn more, please visit the Equine Studies website.

Certificate in Equine Business Management
The Certificate in Equine Business Management designed for anyone interested in working in the administrative and management aspects of the equine industry. Learn how to develop marketing and business plans, create budgets and set up financial records, manage operations and establish yourself as a professional. Take the first step in gaining the skillset required for sustainable equine business success. The Certificate in Equine Business Management requires you to complete six courses.

This program is provided in partnership with Equine Guelph, the Centre for equine education and research at the University of Guelph.

To learn more, please visit the Equine Studies website.

Equine Welfare Certificate
This program challenges you to consider welfare from the perspective of the horse. You will use an evidence-based approach to support your views for or against specific issues relating to equine management and gain an in-depth understanding of the Five Freedoms, a core concept in animal welfare. You will examine the science behind what is required to support sound management and welfare practices for horses in Canada and around the globe. The Equine Welfare Certificate will help you discover solutions to the behavior and health problems horses face because of our management practices.

This program is provided in partnership with the Campbell Centre for the Study of Animal Welfare and Equine Guelph the Centre for equine education and research, at the University of Guelph.

The Equine Welfare Certificate requires you to complete six courses.

To learn more, please visit the Equine Studies website.

Diploma in Equine Studies
The Diploma in Equine Studies developed with Equine Guelph, brings the expertise of a world-class veterinary college to horse owners. You will explore topics like equine safety and management practices, environmental stewardship, equine behavior, nutrition, anatomy, health, and welfare in this comprehensive program. With so many electives to choose from, you can customize your learning to best fit your interests and career goals, with an opportunity to integrate business courses with fundamental equine science studies. Whether you are new to the equine industry or have been involved for many years, the Diploma in Equine Studies will give you the extensive equine education that you are looking for.

The Diploma in Equine Studies requires you to complete ten courses.

This program is delivered in partnership with Equine Guelph, Centre for equine education and research at the University of Guelph.

To learn more, please visit the Equine Studies website.

Online Horticulture Studies Diploma Programs:
Horticulturist Diploma
The Horticulture Diploma is designed to produce highly knowledgeable, skilled and versatile graduates looking to work in parks and recreation, institutional grounds, nurseries, greenhouses, garden centers, or as a naturalist or professional gardener. To achieve the Horticulture Diploma, students must successfully complete ten courses: five required courses and five elective courses.

The five required courses are:
- Soil and Plant Growth
- Plant Identification
- Integrated Pest Management
- Business Principles in Horticulture
- Horticulture Capstone

Elective courses can be selected by the student from the listing shown in Table 1. Students can mix and match electives to suit their goals and objectives or they can complete the two (2) elective courses associated with an area of focus. If students successfully complete the two courses associated with an area of focus, the area of focus will be listed on their Diploma (e.g. Horticulture Diploma, Area of Focus in Greenhouse Production).

Table 1

<table>
<thead>
<tr>
<th>Area of Focus</th>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Turf Management</td>
<td>1. Turf Management</td>
</tr>
<tr>
<td>2. Weed Management</td>
<td>2. Weed Management</td>
</tr>
<tr>
<td>2. Greenhouse Production</td>
<td>1. Greenhouse Production</td>
</tr>
<tr>
<td>3. Natural Landscape Management</td>
<td>1. Naturalizing and Restoring</td>
</tr>
<tr>
<td>4. Arboriculture</td>
<td>2. Arboriculture</td>
</tr>
<tr>
<td>4. Nursery Production</td>
<td>1. Nursery Production</td>
</tr>
<tr>
<td>5. Urban Agriculture</td>
<td>1. Issues in Urban Farming</td>
</tr>
<tr>
<td>2. Vegetable Production</td>
<td>2. Vegetable Production</td>
</tr>
<tr>
<td>6. Landscape Design</td>
<td>1. Landscape Design I</td>
</tr>
<tr>
<td>2. Ecological Design</td>
<td>2. Ecological Design</td>
</tr>
</tbody>
</table>

Last Revision: July 4, 2019
Landscape Design Diploma

The Landscape Design Diploma will elevate your level of understanding and skills related to commercial and residential landscape design. Students who graduate from the diploma will have thorough knowledge of landscape design techniques and will be able to present their ideas to prospective clients in a professional manner. The Landscape Design Diploma is suited to anyone looking to pursue a career in landscape design or upgrade their credentials as a landscape designer.

To achieve the Landscape Design Diploma, students must successfully complete ten courses: eight required courses, a choice of two courses and one elective course.

The eight required courses are:

• Landscape Design I
• Landscape Design II
• Ecological Design
• Plant Identification
• Graphic and Presentation Styles
• Landscape Construction
• Business Principles in Horticulture
• Landscape Design Capstone Project

Students must choose one of the following two courses:

• Computer Assisted Drafting I
OR

• Soil and Plant Growth

One elective course must be selected by the student from the approved listing shown in Table 1.

To learn more about the Horticulture Diplomas, please visit the Horticulture Studies website.

Online Horticulture Studies Certificate Programs:

There are five certificate programs. Students may choose to complete individual courses or complete a set of courses that count towards the certificates. Students who complete either the Horticulture or Landscape Design Certificate may continue to complete additional courses towards a diploma.

Horticulturist Certificate

The Horticulturist Certificate will show you how to create beautiful and hardy landscapes through innovative residential garden design tactics and strategies. You will explore topics related to plant care principles, soil conditions, plant science, and horticulture. The program is designed to prepare you with the knowledge and skills related to pests, diseases and weed management so you can effectively address plant health issues and optimize the well-being of any garden. Designed specifically for gardeners, this program will enhance your knowledge and skills with respect to the residential garden environment.

To achieve the Horticulturist Certificate, students must successfully complete five courses: three required courses and two elective courses.

The three required courses are:

• Soil and Plant Growth
• Plant Identification
• Integrated Pest Management

Elective courses can be selected by the student from the listing shown in Table 1. Students can mix and match electives to suit their goals and objectives or they can complete the two (2) elective courses associated with an area of focus. If students successfully complete the two courses associated with an area of focus, the area of focus will be listed on their Diploma (e.g. Horticulture Diploma, Greenhouse Production Area of Focus).

To learn more about the Horticulturist Certificate, please visit the Horticulture Studies website.

Landscape Design Certificate

The Landscape Design Certificate will show you how to improve the design of current landscapes and offer meaningful solutions to landscape design challenges. Learn how to produce landscape drawings, recommend construction materials that satisfy client intentions, and deliver aesthetically pleasing design and function into residential and commercial settings.

To achieve the Landscape Design Certificate, students must successfully complete five courses: four required courses and a choice of two courses.

To learn more about the Landscape Design Certificate, please visit the Horticulture Studies website.

Maintaining Golf Courses Certificate

The Maintaining Golf Courses Certificate is designed to provide students with valuable skills and knowledge related to golf course design and construction techniques, tree care, and the environmental care of golf courses. Develop practical and applied skills to design, construct and manage golf courses and turf, keeping the sustainable care of turf and plant communities at the forefront.

To achieve the Certificate, students must successfully complete six required courses and two (2) elective courses.

Sustainable Urban Agriculture Certificate

The Sustainable Urban Agriculture Certificate is designed for urban dwellers, city planners and community gardeners interested in growing food in a sustainable manner to support families, neighbourhoods and communities.

To achieve the Certificate, students must successfully complete five courses: four required courses and one elective.

To learn more about the Sustainable Urban Agriculture Certificate, please visit the Horticulture Studies website.

Professional Association Affiliations

Several courses have been approved by the following associations and may be applied to each association's respective professional programs:

American Association of Sexuality Educators Counselors and Therapists (AASECT)
Association of Administrative Assistants
Board of Examiners in Sex Therapy and Counselling in Ontario (BESTCO)
Canadian Golf Superintendents Association
Canadian Payroll Association (CPA)
College of Family Physicians of Canada
Equestrian Canada
Golf Course Superintendents Association of America
Human Resources Professionals Association
Industrial Accident Prevention Association (IAPA)
Integrated Pest Management - Plant Health Care Council
Ontario Association for Marriage and Family Therapy
Ontario Association of School Business Officials
Ontario Association of Veterinary Technicians (OAVT)

Summer Studies (Summer Semester)

Because the University operates on a three-semester system, a broad range of course offerings are available in the Summer Semester (May to August). During the summer months, degree-credit courses are offered in a variety of formats to meet the needs of full-time and part-time students both on and off campus.

Visit the OpenEd website for more information on distance education.

Last Revision: July 4, 2019
XII. Course Descriptions

General Information

Course Labelling and Levels
Each course is identified by a two-part code. The first part of the code refers to the subject area, the second to the level of the course. Thus, the course PSYC*3570 is a course in the subject area of Psychology (PSYC*XXXX), and is of a level that places it among courses in the 3000 series. The series 1000, 2000, 3000 and 4000 numbers are intended to indicate progressively more demanding content, and correspondingly increasing competence on the part of the students enrolled in the course. Courses in the 1000 series are mainly for first year students, those in the 2000 series are mainly for second year students, and those in the 3000 series are for third year students. Similarly, courses in the 4000 series are mainly intended to be taken by students in the fourth year of honours programs. It is important that students planning their courses have clearly in mind the significance of these numbers so that they may guard against undertaking course work at levels for which they are insufficiently prepared. A two-semester course (e.g. AGR*2351/2) is taken over 2 continuous semesters and counts as 1 course attempt per semester for classification, continuation of study and calculation of fees. Two-semester courses cannot be split.

Course Information
The letters S, F, W indicate the University's intention to offer the course in the Summer (S), Fall (F) or Winter (W) semester during the academic year covered by this Calendar. Although courses normally will be offered in the semester indicated, students preparing their course programs are advised to consult the Undergraduate Course Timetable. The University cannot guarantee that all courses will be offered in the exact semester indicated. The letter U indicates that an intended offering has not been assigned to the course. Students should consult the Undergraduate Course Timetable posted on WebAdvisor or contact the departments offering those courses to determine the semester offerings.

The figures in parentheses ( ) following the semester designation are a general guide to the lecture and laboratory contact hours per week, the first digit being the number of lecture hours and the second, the number of laboratory hours. The credit weight for each course appears in brackets [ ]. A credit weight of [0.50] indicates 10-12 student effort hours, including class time, on academic tasks associated with the course.

Detailed course descriptions are maintained at the office of the department offering the course. Some courses, designated "Experiential Learning" courses in the Calendar description, are deliberately designed to accommodate the need to grant academic credit for experiential learning external to regular courses, in such contexts as co-operative education, field observation/job shadowing, internship/externships, practical, service learning, or work study (and other approved experience). Prior approval for admission to these courses must be obtained from the department and instructor concerned.

Course Prerequisites
In lists of course prerequisites, "or" conditions are spelled out explicitly, but "and" conditions are indicated with a comma ",". For example: "CSTU*2270, FRHD*2010, NUTR*2010" means "CSTU*2270 and FRHD*2010 and NUTR*2010". A number of courses have stated prerequisites which are prior requirements for entry to the course. Students who do not satisfy course prerequisites, or who in the opinion of the instructor do not possess an equivalent background to that of the stated prerequisites, are not eligible to enroll in the course. When some specific background is desired but not required, the course description will include a statement of recommended background. It is understood that the instructor may accept equivalent courses from other institutions in place of the stated prerequisites. Students who wish to enroll in courses for which they do not have the stated prerequisite(s) must obtain instructor approval as outlined in Section VIII, Undergraduate Degree Regulations and Procedures, in this Calendar.

Course Equates and Restrictions

Equate - Equate indicates a course identical to the one under which it is listed. The course may have been re-numbered or may be cross-listed under two subject areas. Students will not be permitted to register in equated courses.

Restrictions - A restriction is a "rule" that is placed on the computer system (Colleague) at the direction of an academic department so that particular students may not register in particular courses. The course may be restricted because there is sufficient overlap in content with another course so that it is inappropriate for the student to take a similar course for credit. In a different instance, the course may be restricted by "Instructor Consent" so that the student must discuss the special requirements of the course with the instructor before enrolling. Or, alternatively, the restriction may reflect a "Priority Access" designation for enrolment management purposes. (See Priority Access).
Accounting

Department of Management

ACCT*1220 Introductory Financial Accounting F,W (3-0) [0.50]
This introductory course is designed to develop a foundational understanding of current accounting principles and their implication for published financial reports of business enterprises. It builds the base of knowledge and understanding required to succeed in more advanced study of accounting. The course approaches the subject from the point of view of the user of accounting information rather than that of a person who supplies the information.

Offering(s): Also offered through Distance Education format.
Restriction(s): ACCT*2220, This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Management

ACCT*1240 Applied Financial Accounting W (3-0) [0.50]
This course requires students to apply the fundamental principles emanating from accounting’s conceptual framework and undertake the practice of financial accounting. Students will become adept at performing the functions related to each step in the accounting cycle, up to and including the preparation of the financial statements and client reports. Students will also develop the skills necessary for assessing an organization’s system of internal controls and financial conditions.

Prerequisite(s): ACCT*1220 or ACCT*2220
Restriction(s): ACCT*2240, This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Management

ACCT*2230 Management Accounting F,W (3-0) [0.50]
This course emphasizes the use of accounting information to facilitate effective management decisions. Topics include cost determination, cost control and analysis, budgeting, profit-volume analysis and capital investment analysis.

Prerequisite(s): ACCT*1220 or ACCT*2220
Equate(s): AGE*2230, BUS*2230
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Management

ACCT*3230 Intermediate Management Accounting S,W (3-0) [0.50]
This course continues the managerial decision making focus of ACCT*2230. Topics include process costing, transfer pricing, the decision making process, variances and performance measurement.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): ACCT*2230
Equate(s): BUS*3230
Restriction(s): Enrolment may be restricted to particular degrees or programs. See department for more information.
Department(s): Department of Management

ACCT*3280 Auditing I,S,F (3-0) [0.50]
Auditing I is an examination of the principles and theory underlying the practice of auditing. Concepts of materiality and audit risk are examined and discussed. Sources and techniques for gathering auditing evidence will also be examined. Modern organizations rely on information systems, technology and internal controls to manage and monitor their operations and the impact of these systems on the quality of information produced and on the scope of audits are important elements of this course.

Prerequisite(s): ACCT*3330
Department(s): Department of Management

ACCT*3330 Intermediate Financial Accounting I,F,W (3-0) [0.50]
This course presents a critical evaluation of accounting concepts, principles and practices in relation to both the traditional and current value accounting measurement models. Emphasis will be on the effect of alternative accounting practices and measurement models on income determination and asset valuation.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): ACCT*1220 or ACCT*2220
Equate(s): BUS*3330
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Management

ACCT*3340 Intermediate Financial Accounting II S,F (3-0) [0.50]
This course focuses on how entities account for current and non-current liabilities and equity accounts, including, income taxes, leases, pensions and other post retirement benefits, share equity and retained earnings, stock options. Additional topics may include earnings per share, restatements and statement analysis.

Prerequisite(s): ACCT*3330
Department(s): Department of Management

ACCT*3350 Taxation S,F (3-0) [0.50]
The fundamentals of the tax system as it applies to all taxpayers will be the focus of the first half of the course. The second half will develop forms of business organizations from a tax perspective. Basic tax planning techniques which attempt to maximize the cash flows and returns on investments will then be studied. The emphasis in the course is on business decision making. A review of personal financial planning and investment decisions will also be included.

Prerequisite(s): ACCT*3330
Restriction(s): Enrolment may be restricted to particular degrees or programs. See the department for more information.
Department(s): Department of Management

ACCT*4220 Advanced Financial Accounting F (3-0) [0.50]
This course is a critical evaluation of issues and problems associated with business combinations, long-term intercorporate investments, foreign operations and accounting for not-for-profit organizations. There is a strong emphasis on applying this body of knowledge through practical problems.

Prerequisite(s): (ACCT*3330 or BUS*3330), (ACCT*3340 or BUS*3340)
Equate(s): BUS*4220
Restriction(s): Enrolment may be restricted to particular degrees or programs. See the department for more information.
Department(s): Department of Management

ACCT*4230 Advanced Management Accounting W (3-0) [0.50]
This course provides advanced coverage of management accounting concepts and the application of management accounting information for managerial decision-making. This course extends the concepts covered in intermediate management accounting and also integrates pertinent situational problems from other functional areas of enterprises such as global trade and process controls.

Prerequisite(s): ACCT*3230 or BUS*3230
Equate(s): BUS*4230
Restriction(s): Enrolment may be restricted to particular degrees or programs. See the department for more information.
Department(s): Department of Management

ACCT*4270 Auditing II F (3-0) [0.50]
This course considers a number of advanced topics concerning both the auditor and audit techniques within the context of public accounting. It builds on the knowledge of the audit task derived in Auditing I - ACCT*3280 as well as the depth and breadth of knowledge gained in ACCT*3330 and ACCT*3340.

Prerequisite(s): ACCT*3280 or BUS*3280
Equate(s): BUS*4270
Department(s): Department of Management

ACCT*4290 IT Auditing and Data Analytics W (3-0) [0.50]
This course introduces the student to the field of auditing within a computer based environment. Students will develop an enhanced understanding of information systems, information system risks, management controls, control evaluation, audit strategies, and computer assisted audit techniques. The course will also introduce data analytic techniques used to analyze structured and unstructured data.

Prerequisite(s): ACCT*3280 or BUS*4280
Equate(s): BUS*4290
Department(s): Department of Management

ACCT*4340 Accounting Theory W (3-0) [0.50]
This course will draw on accounting research, primarily empirical research. Rather than covering specific GAAP rules, the course will focus on how investors react to GAAP rules, why financial information is important, and how its use/misuse affects investor decision making and management behaviour. The course is thus about accounting, instead of about how to apply accounting standards.

Prerequisite(s): ACCT*4220
Restriction(s): ACCT*4240
Department(s): Department of Management
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Description</th>
<th>Prerequisite(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT*4350</td>
<td>Income Taxation II F</td>
<td>An intensive study of the Canadian Income Tax Act and related statutes, this course will focus on the application to the taxation of individuals, partnerships and corporations. A strong emphasis will be placed on compliance and tax planning.</td>
<td>ACCT<em>3350 or BUS</em>3350</td>
<td>Department of Management</td>
</tr>
<tr>
<td>ACCT*4440</td>
<td>Integrated Cases in Accounting W</td>
<td>This course will help students develop an analytical approach to analyzing accounting problems and improve professional judgement. Students will apply previously-gained technical knowledge of accounting, tax, assurance, finance, and corporate governance to various financial reporting and advisory problems and scenarios. They will develop an enhanced understanding of the impact of user and preparer objectives on the selection of accounting policies, and accounting estimates in an environment of some uncertainty.</td>
<td>ACCT*4220</td>
<td>Department of Management</td>
</tr>
</tbody>
</table>
Agriculture

Ontario Agricultural College, Dean's Office

AGR*1100 Introduction to the Agri-Food Systems F (6-0) [1.00]
This introductory course provides an overview of Canadian and global agri-food systems. Students will be introduced to many different facets of agriculture, including primary production (conventional and organic) of commodity, mid-value and high-value crops, and livestock. Students will explore the agri-food system by tracing consumer end-products back to primary production. Modern, industrial agri-food systems as well as subsistence farming will be discussed. The course incorporates an experiential learning component in which students will explore a new agri-food opportunity for Ontario by designing and assessing the value chain.
Restriction(s): AGR*1100 . AGR*1250 . Restricted to students in BAH.FARE, BSC(AGR), Minor in Agriculture
Department(s): Department of Plant Agriculture, Department of Animal Biosciences
Location(s): Guelph

AGR*2050 Agroecology W (3-0) [0.50]
This course considers the interactions of all important biophysical, technical and socioeconomic components of farming systems and examines these systems as the fundamental units of study. Mineral cycles, energy transformations, biological processes and socioeconomic relationships are analyzed as a whole in an interdisciplinary fashion.
Prerequisite(s): (AGR*1110 or AGR*2150), (BIOL*1050 or BIOL*1070)
Restriction(s): CROP*2110
Department(s): Department of Plant Agriculture, Department of Animal Biosciences

AGR*2150 Plant Agriculture for International Development F (3-0) [0.50]
This course will provide students interested in international development with an introductory mechanistic understanding of the biology underlying crop production in developing nations. Emphasis will be placed on simple, low-cost solutions from biology that have the potential to aid efforts in international development. This course is accessible to science and non-science students.
Prerequisite(s): 4.00 credits
Restriction(s): AGR*2470
Department(s): Department of Plant Agriculture

AGR*2230 Soils in Agroecosystems F (3-2) [0.50]
This course is an introduction to soil resources with emphasis on management practices that will sustain the productivity of these resources and enhance the quality of the ecosystems of which they are a part. Students will develop a management plan for a farm that will take into account the roles of geological, geomorphological, biological, climatic and temporal factors on the formation, properties and uses of soils. The management plans will be placed in the broader context of provincial policies related to soil, air and water resources and local zoning regulations.
Prerequisite(s): 2.50 credits
Restriction(s): ENVS*2060 or SOIL*2010
Department(s): School of Environmental Sciences

AGR*2350 Animal Production Systems, Health and Industry F (3-3) [0.50]
This course is designed to introduce the student to the Agri-food system in Ontario, nationally and internationally. All major animal industries will be covered starting from the grocery store and working back to the primary producer. Companion and exotic animals will also be covered. Topics include food, health and wellness (domestic animals and human), nutrition, housing, genetics, reproduction, husbandry practices and processing. The course includes laboratories and animal production unit tours.
Prerequisite(s): BIOL*1030 or (2 of BIOL*1050, BIOL*1070, BIOL*1080, BIOL*1090)
Department(s): Department of Animal Biosciences

AGR*2470 Introduction to Plant Agriculture F (3-3) [0.50]
The basic principles of plant morphology, nutrition, growth and development will be related to where and how agriculturally significant plants are grown. Agroecosystems and farming systems will be considered as frameworks for crop production analyses. The course uses examples from temperate, subtropical and tropical crops and cropping systems. Labs include problem-solving exercises in the context of plant production.
Prerequisite(s): BIOL*1050 or BIOL*1070
Restriction(s): AGR*2150
Department(s): Department of Plant Agriculture

AGR*2500 Field Course in International Agriculture W (3-0) [0.50]
This course introduces students to a wide range of tropical and subtropical agricultural production systems and issues. The course is comprised of a weekly 3 hour evening lecture and a two week field trip to Costa Rica where students will visit corporate and individual farms, university and government research stations. The field trip occurs during Reading Week in February. This course must be recorded as part of your Winter course selection. The cost of the course is approximately $2500.00 per student, in addition to tuition and compulsory fees. Students must identify their interest in taking this course by contacting the OAC Dean's Office before the October course selection period of the previous year. In order to confirm reservations for travel arrangements a deposit of $300 in the form of a cheque, made payable to the University of Guelph, must be submitted to the OAC Dean's Office by November. Some financial support for travel may be available.
Prerequisite(s): (AGR*1110 or AGR*1250) or registration in International Development
Restriction(s): Registration in BSC(AGR) or B.A.ID or Minor in Agriculture Instructor consent required.
Department(s): Dean's Office, Ontario Agricultural College

AGR*3010 Special Studies in Agricultural Science I S,F,W (3-0) [0.50]
A special study option that enables undergraduate students in semesters 5 through 8 to undertake specific projects in agricultural sciences. The topic of the special study will be determined in consultation with an faculty member and the individual student. Students are responsible for making appropriate arrangements with faculty at the departmental and/or college level prior to registration for the course.
Prerequisite(s): 10.00 credits
Restriction(s): Instructor consent required.
Department(s): Department of Plant Agriculture

AGR*3450 Research Methods in Agricultural Science F (3-2) [0.50]
This course provides students with an opportunity to enhance their understanding of the principles and processes of agricultural research. The course will provide students with a foundation in critical thinking, experimental design and data analysis that will be applicable to independent research projects and graduate studies. Students will also explore the practical requirements and limitations of scientific research. Laboratory and field safety, animal care, intellectual property and research ethics will be reviewed. Students will be required to practice both oral presentation and writing skills as core components of their evaluation.
Prerequisite(s): Completion of 7.50 credits including (1 of GEOG*2460, STAT*2040 or STAT*2060, STAT*2080)
Restriction(s): Enrollment in the BSC(AGR), BBRM, BSC.ABIO, BSC.PLSC or Minor in Agriculture.
Department(s): Department of Plant Agriculture, Department of Animal Biosciences

AGR*3500 Experiential Education I F (3-0) [0.50]
Student initiated experiential learning opportunities can be developed as a credit course in consultation with a supervising faculty member. Details of the activities included in the program will be outlined in a learning contract initiated by the student and agreed by the faculty supervisor in the April prior to the commencement of the work experience. The employer will also provide a description of the project and/or the work experience. The course is designed to meet the needs of BSC(Agr.), BBRM and Agricultural Business students.
Prerequisite(s): 5.00 credits
Restriction(s): Instructor consent required.
Department(s): Department of Plant Agriculture

AGR*4010 Special Studies in Agricultural Science II S,F,W (3-0) [0.50]
This special study option enables undergraduate students in semesters 5 through 8 to undertake specific projects in agricultural science. The topic of the special study will be determined in consultation with a faculty member and the individual student. Students are responsible for making appropriate arrangements with faculty member prior to registration for the course.
Prerequisite(s): 15.00 credits
Restriction(s): Instructor consent required.
Department(s): Department of Plant Agriculture

AGR*4020 Precision Techniques for Plant Agriculture F (3-0) [0.50]
This course will be a survey of principles and applications of technologies supporting precision farming and planning for natural resource data management. Topics will include Global positioning system (GPS), yield monitoring and mapping, remote sensing, geographic information system (GIS), variable rate technologies (VRT), data layering, Internet information access, and computer software for management.
Prerequisite(s): AGR*2470, STAT*2040, (BIOL*1050 or BIOL*1070)
Department(s): Department of Plant Agriculture

Last Revision: July 4, 2019 2019-2020 Undergraduate Calendar
### AGR*4450 Research Project I S,F,W (0-12) [1.00]

This course provides for the independent study of a current topic in agricultural or environmental science designed to encourage senior undergraduates to conduct research. The course includes participation in meetings organized by the coordinator, work with a faculty advisor to develop a research project, formulate hypotheses, design and carry out preliminary experiments to test the hypotheses. Students will carry out independent library research, begin experimental work, prepare a written report and make a presentation to other students in the course of the research plan and preliminary results. Students must make arrangements with both the faculty supervisor and the course coordinator at least one semester before starting the course. This course will normally be followed by AGR*4460 to provide 2 semesters to complete the research project.

**Prerequisite(s):** 10.00 credits

**Restriction(s):** Permission of the course coordinator (contingent on the availability and agreement of a faculty advisor). BSC(Agr) or BSC or BBRM, 70% cumulative average.

**Department(s):** Dean's Office, Ontario Agricultural College

### AGR*4460 Research Project II S,F,W (0-12) [1.00]

Independent study of a current topic in agricultural or environmental science designed to encourage senior undergraduates to conduct research. The focus of this course will be the completion of the research plan developed in AGR*4450 by the student in consultation with a faculty advisor. The course includes participation in meetings organized by the coordinator and meetings with a faculty advisor to review research progress. Students will carry out independent research, prepare a written report of the research findings in a scholarly style and make a presentation to other students in the course of the research results. Open to students in semesters 6, 7 and 8 of the B.SC. (Agr.) or B.Sc. degree program.

**Prerequisite(s):** AGR*4450

**Restriction(s):** Permission of the course coordinator and faculty advisor.

**Department(s):** Dean's Office, Ontario Agricultural College

### AGR*4600 Agriculture and Food Issues Problem Solving W (3-0) [1.00]

The issues facing the agriculture and food sector are many and varied and relate to the economy, the environment and society. Within these issues there are problems which require thoughtful solutions. Working in teams, with guidance from faculty advisors, students will have an opportunity to develop solutions to real-world problems facing the agriculture and food sector. In the process students will have an opportunity to develop their research, communication, presentation, writing and group work skills.

**Prerequisite(s):** 12.50 credits

**Restriction(s):** Registration in BSC(AGR), BBRM, B.COMM.FAB, B.COMM.FAB.C, BSC.PLSC, or BA.FARE program, or Minor in Agriculture.

**Department(s):** Department of Plant Agriculture
Anatomy

Department of Biomedical Sciences

For course listings and descriptions see Biomedical Sciences.

Additional course listings may be found in the course descriptions for Human Kinetics, Veterinary Medicine and Zoology.
**Animal Science**

*Department of Animal Biosciences*

**ANSC*3120 Principles of Animal Care and Welfare W (4.5-0) [1.00]**

Students will be introduced to the major ethical theories that deal with humanity’s duties to animals. The relationship of ethics to science will be discussed. Factors that contribute to the quality of life of animals will be considered and methods of assessing animal welfare will be described. Common causes of reduced animal welfare will be covered. The course will also deal with how different cultures approach animal welfare and attempt to regulate it.

Prerequisite(s): BIOL*1050  
Restriction(s): ANSC*3210  
Department(s): Department of Animal Biosciences

**ANSC*2330 Horse Management Science F (3-0) [0.50]**

An introduction to horse management designed to give those with an interest in the various segments of the horse industry a strong scientific basis for production and management decisions. The course includes study of the evolution of our current industry, the biology of growth, performance and management of the equine athlete. The evaluation of conformation as it relates to performance as well as aspects of behaviour, nutrition, reproduction and genetics consistent with the level of the course are included.

Prerequisite(s): [ BIOL*1040 or (2 of BIOL*1050, BIOL*1070, BIOL*1080, BIOL*1090)]  
Restriction(s): Not available to students registered in BBRM.EQM program.  
Department(s): Department of Animal Biosciences

**ANSC*2340 Structure of Farm Animals W (3-0) [0.50]**

This course is an introduction to anatomy and carcass structure of farm animals. Consideration is given to the major systems in the body and the whole range of animal structure from molecular biology to commercial carcass grading. The course provides a basic understanding of factors such as meat tenderness, adipose development in the carcass, abnormalities of meat quality such as PSE pork and dark-cutting beef, and carcass composition.

Offering(s): Also offered through Distance Education format.  
Prerequisite(s): 2 of BIOL*1050, BIOL*1070, BIOL*1080, BIOL*1090  
Department(s): Department of Animal Biosciences

**ANSC*3040 Animal Reproduction W (3-3) [0.50]**

This course takes a multi-species approach to understanding the basic principles of animal reproduction. Both the anatomy and the physiology of reproductive systems are explored in agricultural, companion and wildlife species with an emphasis on animals under human management. In addition, the development and application of assisted reproductive technologies (ART) for animal management are introduced.

Prerequisite(s): ANSC*3080  
Department(s): Department of Animal Biosciences

**ANSC*3050 Aquaculture: Advanced Issues F (3-0) [0.50]**

This course examines the fundamental principles and advanced interdisciplinary issues involved in the farming of aquatic organisms. The course will concentrate primarily on finfish species due to their worldwide commercial importance. Lectures will cover fish physiology, behaviour, nutrition, genetics, water quality, health and disease, reproductive techniques, economic, political and legal issues and various culture technologies. Students will analyze contemporary challenges facing the aquaculture industry through exercises requiring interdisciplinary knowledge, lateral thinking, creative problem solving and bridging science and technology to issues management.

Prerequisite(s): 8.00 credits in biology, including AGR*2350 or ZOO*2090  
Department(s): Department of Animal Biosciences

**ANSC*3080 Agricultural Animal Physiology F (3-1.5) [0.50]**

This course is an introduction to the physiology of domesticated farm animals. The course will emphasize homeostatic control of the major body systems. The lectures cover the nervous, cardiovascular, respiratory, urinary, immune, endocrine and reproductive systems. The lectures and laboratories are closely integrated.

Prerequisite(s): BIOL*2580 or EGN*2040  
Restriction(s): Registration in BSC(Agr), BSC.ABIO or BBRM.EQM, Minor in Agriculture.  
Department(s): Department of Animal Biosciences

**ANSC*3090 Vertebrate Ethology W (3-0) [0.50]**

This course deals with why vertebrates behave as they do (with particular emphasis on mammals and birds), covering the causation of behaviour (including learning, motivation, affective states, hormones, sensory processing, and neurobiological mechanisms); function (both immediate/proximate and adaptive/ultimate); ontogeny (including socialization and sensitive periods); and phylogeny (especially the influences of taxonomic group and domestication). This framework is then applied to the following aspects of animal behaviour: foraging, anti-predator responses, sleep, sociality, mating, parental behaviour, play, dispersal and territoriality, animal intelligence, and behavioural pathologies.

Prerequisite(s): ANSC*1210  
Restriction(s): ANSC*4090, Restricted to students in BSCH.ABIO and BSAG.ANSC  
Department(s): Department of Animal Biosciences

**ANSC*3120 Introduction to Animal Nutrition F (3-2) [0.50]**

This course applies the principles of nutrition to the development of diets and feeding programs for the various species of animals of agricultural importance.

Prerequisite(s): NUTR*3210  
Restriction(s): Registration in BSC(Agr) or BSC.ABIO  
Department(s): Department of Animal Biosciences

**ANSC*3170 Nutrition of Fish and Crustacea W (3-0) [0.50]**

This course examines growth, digestive and metabolic processes, nutritional requirements and practical feeding programs for fish and crustaceans with an emphasis on those species used in aquaculture.

Prerequisite(s): NUTR*3210  
Department(s): Department of Animal Biosciences

**ANSC*3180 Wildlife Nutrition W (3-0) [0.50]**

This course is a study of the nutrition of avian and mammalian wildlife with emphasis on North American species and the role of nutrition in survival and population growth of wildlife in their natural habitat.

Prerequisite(s): NUTR*3210  
Department(s): Department of Animal Biosciences

**ANSC*3270 Animal Disorders W (3-0) [0.50]**

This course will highlight common causes of infectious, metabolic and psychological/neurological disorders of domestic and companion animals, and their potential impact on animal welfare and production. Disorders will be addressed in the context of pathophysiology, transmission, and prevention strategies involving environmental enrichment, vaccination, biosafety, nutrition, and genetic selection.

Prerequisite(s): ANSC*3080  
Department(s): Department of Animal Biosciences

**ANSC*4010 Animal Welfare Judging and Evaluation F (0-3) [0.50]**

This course provides senior level students with a structured opportunity to practice assessing animal welfare using scientific evidence. Students learn to present their evaluations in a logical and persuasive manner. They learn general criteria and approaches used to assess welfare and then apply that knowledge for assessment of four different species in practical settings.

Prerequisite(s): 15.00 credits including ANSC*1210, ANSC*3080  
Co-requisite(s): ANSC*4090  
Restriction(s): ANSC*4230, Instructor consent required.  
Department(s): Department of Animal Biosciences

**ANSC*4050 Biotechnology in Animal Science F (3-2) [0.50]**

The course will provide an overview of how biotechnology has impacted biomedical science and animal production. Important principles of recombinant DNA, DNA marker identification, stem cell biology, and generation of transgenic animals will be emphasized. The current challenges and potential opportunities in biotechnology will also be discussed.

Prerequisite(s): MBG*2040 or MBG*2400  
Department(s): Department of Animal Biosciences

**ANSC*4090 Applied Animal Behaviour F (3-0) [0.50]**

This course deals with why domesticated animals behave as they do with reference to causation, function, ontogeny and phylogeny. Basic principles are illustrated by examples taken from all the common domesticated and captive species. Emphasis is placed on the application of behavioural knowledge to improve captive environments and animal production systems. Designing housing, facilities and management procedures to suit the behaviour of the animals in question is also covered.

Prerequisite(s): ANSC*3080  
Department(s): Department of Animal Biosciences
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC*4100</td>
<td>Applied Environmental Physiology and Animal Housing</td>
<td>3-0</td>
<td>ANSC*3080</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4230</td>
<td>Challenges and Opportunities in Dairy Cattle Production</td>
<td>0-6</td>
<td>ANSC<em>3080, ANSC</em>4090</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4260</td>
<td>Beef Cattle Nutrition</td>
<td>3-2</td>
<td>ANSC*3120</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4270</td>
<td>Dairy Cattle Nutrition</td>
<td>3-2</td>
<td>ANSC*3120</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4280</td>
<td>Poultry Nutrition</td>
<td>3-0</td>
<td>ANSC*3120</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4290</td>
<td>Swine Nutrition</td>
<td>3-0</td>
<td>ANSC*3120</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4350</td>
<td>Experiments in Animal Biology</td>
<td>0-6</td>
<td>ANSC<em>3080, ANSC</em>4090</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4470</td>
<td>Animal Metabolism</td>
<td>3-0</td>
<td>NUTR*3210</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4490</td>
<td>Applied Endocrinology</td>
<td>3-0</td>
<td>ANSC*3080</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4560</td>
<td>Pet Nutrition</td>
<td>3-0</td>
<td>NUTR*3210</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4610</td>
<td>Critical Analysis in Animal Science</td>
<td>3-0</td>
<td>ANSC*3080</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4650</td>
<td>Comparative Immunology</td>
<td>3-0</td>
<td>ANSC*3080</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4700</td>
<td>Research in Animal Biology</td>
<td>1, S,F,W</td>
<td>ANSC*3080</td>
<td>Department of Animal Biosciences</td>
</tr>
<tr>
<td>ANSC*4710</td>
<td>Research in Animal Biology II</td>
<td>S,F,W</td>
<td>ANSC*3080</td>
<td>Department of Animal Biosciences</td>
</tr>
</tbody>
</table>

**ANSC*4100 Applied Environmental Physiology and Animal Housing (3-0) [0.50]**

Basic concepts of environmental physiology and their application to animal housing and management will be introduced. The course will review the physics of heat flow, light and air quality as they relate to animal biology and health. Other aspects, such as the physical environment, that impact on animal health and well-being will be discussed.

**Prerequisite(s):** ANSC*3080

**Department(s):** Department of Animal Biosciences

**ANSC*4230 Challenges and Opportunities in Dairy Cattle Production (0-6) [0.50]**

This course will provide senior level students with experience in working as a team to propose solutions to dairy cattle industry problems. Teams of students will critically assess dairy cattle-related businesses at the farm or industry level under the supervision of a faculty member.

**Prerequisite(s):** ANSC*3080, ANSC*3120, MBG*3060

**Restriction(s):** Instructor consent required.

**Department(s):** Department of Animal Biosciences

**ANSC*4260 Beef Cattle Nutrition (3-2) [0.50]**

This course is designed for students to evaluate problems in feeding beef cattle. Relevant aspects of digestion and metabolism of nutrients as well as current issues of feeding beef cattle and diagnosing nutritional deficiencies will be included.

**Prerequisite(s):** ANSC*3120

**Department(s):** Department of Animal Biosciences

**ANSC*4270 Dairy Cattle Nutrition (3-2) [0.50]**

Students will learn how nutrients are transformed from feed into milk and bodies of dairy animals. There will be an emphasis on feed management on farms and developing skills in formulation and evaluation of rations using computer models.

**Prerequisite(s):** ANSC*3120

**Department(s):** Department of Animal Biosciences

**ANSC*4280 Poultry Nutrition (3-0) [0.50]**

This course is designed to evaluate basic and applied poultry nutrition. Students will learn nutrient requirements of poultry, feeding value of ingredients used in poultry feed formulation and how feeding affects the environment, growth, reproduction, health, and composition of poultry products for human consumption.

**Prerequisite(s):** ANSC*3120

**Department(s):** Department of Animal Biosciences

**ANSC*4290 Swine Nutrition (3-0) [0.50]**

This course is designed to explore details of evaluating feed ingredients and formulating diets for swine. Students will use models to evaluate various aspects of nutrient partitioning for growth and reproduction in pigs.

**Prerequisite(s):** ANSC*3120

**Department(s):** Department of Animal Biosciences

**ANSC*4350 Experiments in Animal Biology (0-6) [0.50]**

This course provides an opportunity for directed hands-on projects involving live animals and laboratory techniques. A set of selected projects will be provided by Animal Biosciences faculty within their broad fields of study, for example animal behaviour and welfare, environmental physiology, endocrinology, and reproduction.

**Prerequisite(s):** ANSC*3080, ANSC*4090

**Co-requisite(s):** ANSC*4100, ANSC*4490

**Restriction(s):** Restricted to students in BSCH.ABIO, BSAG.ANSC. Instructor consent required.

**Department(s):** Department of Animal Biosciences

**ANSC*4470 Animal Metabolism (3-0) [0.50]**

Current concepts in whole animal metabolism and the quantitative techniques used to measure whole body metabolic kinetics will be presented. Tissue and organ specific biochemical processes will be integrated with whole body control mechanisms.

**Prerequisite(s):** NUTR*3210

**Department(s):** Department of Animal Biosciences

**ANSC*4490 Applied Endocrinology (3-0) [0.50]**

This course examines the endocrine systems of farm animals and their applications to improve and monitor the production, performance, behavior and health of livestock. Considerable emphasis will be placed upon understanding how knowledge of endocrine regulation can be applied within animal production systems.

**Prerequisite(s):** ANSC*3080

**Department(s):** Department of Animal Biosciences
ANTH*1120 Biological Anthropology F (3-0) [0.50]
In this course students will be introduced to the central concepts of biological anthropology. Potential topics to be explored include hominid evolution, contemporary human diversity, nutrition and diet, and an introduction of forensic anthropology and palaeopathology.
Department(s): Department of Sociology and Anthropology

ANTH*1150 Introduction to Anthropology F,W (3-0) [0.50]
This course deals with humankind from a broad historical and cross-cultural perspective. Theoretical models, case studies and specific methods will be presented. Course topics may include the origin and transformations of human society, the relationship between biological and cultural traits, human language, variation in family structure and religion, the economic and political aspects of human society.
Offering(s): Also offered through Distance Education format.
Department(s): Department of Sociology and Anthropology

ANTH*2160 Social Anthropology W (3-0) [0.50]
Using case studies and ethnographies, this course explores the application of anthropological theory and practice to diverse cross-cultural public issues. Topics of discussion will include some of the following: indigenous rights, international development, social marginalization, health and wellbeing, and gender relations.
Prerequisite(s): ANTH*1150
Department(s): Department of Sociology and Anthropology

ANTH*2230 Regional Ethnography F (3-0) [0.50]
This course offers a survey of ethnographic studies on selected cultural/geographical area(s) of the world. Topics covered may include social, economic and political systems, the colonial encounter, and the theoretical, methodological and political contexts of ethnographic representation.
Prerequisite(s): ANTH*1150
Department(s): Department of Sociology and Anthropology

ANTH*2660 Contemporary Indigenous Peoples in Canada W (3-0) [0.50]
An anthropological analysis of the impact of settler society on Indigenous cultures. Particular emphasis will be given to contemporary issues relating to Indigenous peoples in Canada, including First Nations, Inuit, and Métis peoples. Topics to be covered may include education, treaties and reserves, land claims, government administration, economic development, and reconciliation.
Prerequisite(s): 1 of ANTH*1150, IDEV*1000, SOC*1100
Department(s): Department of Sociology and Anthropology

ANTH*3550 Medical Anthropology W (3-0) [0.50]
This course provides an introduction to medical anthropology and the anthropology of health. We will examine theory, methods, practice, and contemporary and historical topical issues.
Prerequisite(s): (1 of ANTH*2160, ANTH*2230, ANTH*2660, IDEV*2500), SOAN*2120
Department(s): Department of Sociology and Anthropology

ANTH*3650 The Anthropology of Indigenous Peoples Before Canada F (3-0) [0.50]
This course is an anthropological exploration of the events that took place before the arrival of Europeans in what is now Canada. It draws on evidence from a variety of intellectual perspectives including Indigenous knowledges, oral histories, anthropology, archaeology, history, genetics, and linguistics to investigate current understandings and uses of the past. Archaeological time sequences are covered along with stories and debates about human history in the time period before Canada.
Prerequisite(s): (ANTH*2160 or IDEV*2000)(1 of ANTH*2230, ANTH*2660, IDEV*2400, IDEV*2500)
Restriction(s): ANTH*2650
Department(s): Department of Sociology and Anthropology

ANTH*3690 Engaging Anthropological Theory F (3-0) [0.50]
This course offers an analysis of the main trends in anthropological theory and practice. Areas of discussion will include the crisis of representation, interpretive anthropology, feminist anthropology, and agency and structure debates.
Prerequisite(s): ANTH*2160, ANTH*2230, SOAN*2120
Department(s): Department of Sociology and Anthropology

ANTH*3770 Kinship, Family, and Power W (3-0) [0.50]
This course explores the changing nature of what it means to be a family from anthropological and cross-cultural perspectives. Topics of discussion include kinship, descent, marriage, our relationships to ancestors, gender and power relations, and the politics of kinship ties. In addition, the course considers the relevance of kinship to contemporary issues such as gay, lesbian, bisexual and transgendered families, the use of reproductive technologies, and international adoptions.
Prerequisite(s): ANTH*2160, ANTH*2230, SOAN*2120
Department(s): Department of Sociology and Anthropology

ANTH*3840 Seminar in Anthropology F,W (3-0) [0.50]
This course will be offered as a structured seminar on various topics depending upon the interests of the faculty member teaching the course. Topics will be announced and course outlines will be available at course selection. The availability of third and fourth year seminar courses will vary. Students must check with the Department of Sociology and Anthropology to see when seminar courses are available.
Prerequisite(s): 10.00 credits including ANTH*2160, SOAN*2120
Department(s): Department of Sociology and Anthropology

ANTH*3850 Seminar in Anthropology F,W (3-0) [0.50]
This course will be offered as a structured seminar on various topics depending upon the interests of the faculty member teaching the course. Topics will be announced and course outlines will be available at course selection. The availability of third and fourth year seminar courses will vary. Students must check with the Department of Sociology and Anthropology to see when seminar courses are available.
Prerequisite(s): 10.00 credits including ANTH*2160, SOAN*2120
Department(s): Department of Sociology and Anthropology

ANTH*3950 Special Projects in Anthropology S,F,W (3-0) [0.50]
This special study option/reading course is designed to provide advanced undergraduates with an opportunity to explore independently the frontiers and foundations of a field of knowledge. Under supervision, the student will study in greater depth related to regular upper-level courses offered in the department which the student has taken or is taking. Permission of the instructor who will be supervising the study is required.
Prerequisite(s): 10.00 credits
Restriction(s): Instructor consent required. Please note, a student is allowed a total of 1.00 credits only for reading courses.
Department(s): Department of Sociology and Anthropology

ANTH*4000 Anthropological Issues F (3-0) [0.50]
Current issues and future trends in the discipline of socio-cultural anthropology will provide the subject matter of this variable content course. This course is meant to provide an opportunity for socio-cultural anthropology majors to consider the latest developments in the sub-discipline. Course topics will be announced and course outlines will be available at course selection time.
Prerequisite(s): 12.50 credits including ANTH*3690, SOAN*3070
Department(s): Department of Sociology and Anthropology

ANTH*4440 Culture, Rights and Development W (3-0) [0.50]
This course examines the theoretical and practical problems associated with respecting local cultures while also respecting human dignity universally. Various definitions of 'development' will be explored in terms of how they reflect cultural values and global inequalities.
Prerequisite(s): 12.50 credits including (ANTH*3690 or IDEV*2300), (IDEV*2100 or SOAN*3070)
Department(s): Department of Sociology and Anthropology

ANTH*4540 Seminar in Anthropology F (3-0) [0.50]
This course will be offered as a structured seminar on various topics depending upon the interests of the faculty member teaching the course. Topics will be announced and course outlines will be available at course selection. The availability of third and fourth year seminar courses will vary. Students must check with the Department of Sociology and Anthropology to see when seminar courses are available.
Prerequisite(s): 12.50 credits including (ANTH*3690 or SOC*3310), SOAN*3070
Department(s): Department of Sociology and Anthropology
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH*4550</td>
<td>Topics in the Anthropology of Health</td>
<td>This seminar focuses on the anthropological analyses of medical and health issues among current and past populations. The course is based on case studies. It will provide students with a grounding in the theoretical approaches appropriate to anthropological considerations of issues relating to health.</td>
<td>12.50 credits including (ANTH<em>3690 or IDEV</em>2300), (IDEV<em>2100 or SOAN</em>3070)</td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>ANTH*4640</td>
<td>Seminar in Anthropology</td>
<td>This course will be offered as a structured seminar on various topics depending upon the interests of the faculty member teaching the course. Topics will be announced and course outlines will be available at course selection. The availability of third and fourth year seminar courses will vary. Students must check with the Department of Sociology and Anthropology to see when seminar courses are available.</td>
<td>12.50 credits including (ANTH<em>3690 or SOC</em>3310), SOAN*3070</td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>ANTH*4700</td>
<td>Issues in Contemporary Anthropological Theory</td>
<td>This course critically examines current anthropological theories, which may include post-structuralism, post-modernism, neo-Marxism and processual approaches. Attention may also be given to the theoretical and political implications of constructionism and calls for ethnographic reflexivity.</td>
<td>12.50 credits including ANTH<em>3690, SOAN</em>3070</td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>ANTH*4740</td>
<td>Seminar in Anthropology</td>
<td>This course will be offered as a structured seminar on various topics depending upon the interests of the faculty member teaching the course. Topics will be announced and course outlines will be available at course selection. The availability of third and fourth year seminar courses will vary. Students must check with the Department of Sociology and Anthropology to see when seminar courses are available.</td>
<td>12.50 credits including (ANTH<em>3690 or SOC</em>3310), SOAN*3070</td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>ANTH*4840</td>
<td>Seminar in Anthropology</td>
<td>This course will be offered as a structured seminar on various topics depending upon the interests of the faculty member teaching the course. Topics will be announced and course outlines will be available at course selection. The availability of third and fourth year seminar courses will vary. Students must check with the Department of Sociology and Anthropology to see when seminar courses are available.</td>
<td>12.50 credits including (ANTH<em>3690 or SOC</em>3310), SOAN*3070</td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>ANTH*4900</td>
<td>Honours Anthropology Thesis I</td>
<td>Development and design of an honours thesis proposal conducted under the supervision of a faculty member. Recommended to honours major students.</td>
<td>15.00 credits including ANTH<em>3690, (SOAN</em>3070 or SOAN*3120)</td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>ANTH*4910</td>
<td>Honours Anthropology Thesis II</td>
<td>Completion and presentation of honours thesis.</td>
<td>Instructor consent required.</td>
<td>Department of Sociology and Anthropology</td>
</tr>
</tbody>
</table>
## ARAB\*1100 Introductory Arabic I F (3-0) [0.50]
This course provides an introduction to Arabic script, articulation of the sounds, basic grammar, and is designed to enable students to begin communicating in Modern Standard Arabic (MSA).

**Restriction(s):** Arabic speakers are not permitted to register for this class.

**Department(s):** School of Languages and Literatures

## ARAB\*1110 Introductory Arabic II W (3-0) [0.50]
This course is a continuation of Introductory Arabic I with emphasis on oral work. Heritage speakers of Arabic may be admitted with permission of the instructor.

**Prerequisite(s):** ARAB\*1100

**Restriction(s):** Arabic speakers are not permitted to register for this class.

**Department(s):** School of Languages and Literatures
Art History

School of Fine Art and Music

Students with a special interest in particular courses in Art History should consult the School concerning prerequisites.

1. Some Art History lecture courses at the 2000- and 3000-level are offered on alternate years only and many Art History seminars have variable content. For course offerings and course descriptions please see the home page for the School of Fine Arts & Music www.uoguelph.ca/sofam/

2. Many Art History lecture courses are reading-intensive while seminar courses are writing and presentation-intensive.

3. Honours majors in Art History are required to take two 4000-level seminars (excluding ARTH*4620), preferably in their 7th and 8th semesters. Please see the individual course descriptions for pre-requisites and restrictions for these courses.

**ARTH*1510 Art Historical Studies I F (3-0) [0.50]**

This course considers the visual arts in the Western tradition from prehistory through the Middle Ages. Emphasis will be placed on historical and critical analysis of key monuments and on the prerequisite technologies, as well as on various ways of looking at the visual past and present.

*Department(s):* School of Fine Art and Music

**ARTH*1520 Art Historical Studies II W (3-0) [0.50]**

A consideration of the visual arts in the Western tradition. Emphasis will be placed on historical and critical analysis of key monuments and on the prerequisite technologies, as well as on various ways of looking at the visual past and present. Focus will be on the visual arts from the Renaissance to today.

*Department(s):* School of Fine Art and Music

**ARTH*2050 Modern Latin American Art F (3-0) [0.50]**

This course is an introduction to the study of visual culture and theory from South and Central America, Mexico and the Caribbean featuring art from the 20th century to the present.

*Offering(s):* Offered in odd-numbered years.

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Department(s):* School of Fine Art and Music

**ARTH*2060 Aboriginal Arts in the Americas F (3-0) [0.50]**

This course offers an introduction to the aboriginal cultures of North, South, and Central America with special emphasis on the pre-contact period. The interdisciplinary approach will take into account recent debates about methodology, ethnocentricity, and aboriginal viewpoints.

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Department(s):* School of Fine Art and Music

**ARTH*2070 Art of the USA W (3-0) [0.50]**

In art, the 20th century has been referred to as “The American Century.” Artists in the USA have a tradition of creating new visual languages, of using new ideas and technologies, and of representing the vanguard. Where did these ideas originate, and how has the USA determined our notions of what art is? This survey course focuses on modern American artists, on the evolution and growth of modern visual culture, and on how technologies and societies impact on artistic taste.

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Department(s):* School of Fine Art and Music

**ARTH*2120 Introduction to Museology W (3-0) [0.50]**

The course will examine the history of collections, traditions of cultural representation and display, constructions of authenticity, trade and exchange.

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Department(s):* School of Fine Art and Music

**ARTH*2150 Art and Archaeology of Greece F (3-0) [0.50]**

This course is a survey of Ancient Greek Art and Archaeology, with stress on form and function plus stylistic trends and aesthetic values. The course will illuminate the cultural, social, and political life in Ancient Greece. (Also listed as CLAS*2150).

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Equate(s):* CLAS*2150

*Department(s):* School of Fine Art and Music

**ARTH*2220 The Visual Arts Today F (3-0) [0.50]**

This course is an introduction to contemporary visual culture, its current controversies and its historical roots. The avant-garde movements of the modern period and the impact of new technologies and media will be examined within a rich historical context. Topics will include international exhibitions, selling art, art and popular culture, censorship, and the relation between words and images.

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Restriction(s):* ARTH*1220 This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

*Department(s):* School of Fine Art and Music

**ARTH*2280 Modern Architecture W (3-0) [0.50]**

This course is an investigation of architectural theory and practice within the social and spatial complexities of national and international life.

*Offering(s):* Offered in odd-numbered years.

*Prerequisite(s):* 2.00 credits

*Department(s):* School of Fine Art and Music

**ARTH*2290 History of Photographic Media S (3-0) [0.50]**

This course is an introduction to the history of photography through to its application in contemporary visual arts.

*Offering(s):* Offered through Distance Education format only.

*Prerequisite(s):* 2.00 credits

*Department(s):* School of Fine Art and Music

**ARTH*2480 Introduction to Art Theory and Criticism F (3-0) [0.50]**

This course provides an overview of some of the most significant methodological approaches and critical practices used by art historians to write about visual culture. Traditional methods of art historical analysis include connoisseurship, iconography, and formalism. With these we will be exploring newer interpretative models and multidisciplinary approaches such as structuralism, semiotics, post-structuralism, and psychoanalytic theory as well as political theories such as feminism and socio-cultural theory.

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Restriction(s):* This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

*Department(s):* School of Fine Art and Music

**ARTH*2490 History of Canadian Art F (3-0) [0.50]**

This course provides an overview of the visual arts in Canada from the earliest times to the present, with emphasis on the diverse contributions made by the First Nations, by French and British colonization, and by subsequent settlers from a variety of different cultural origins.

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Department(s):* School of Fine Art and Music

**ARTH*2540 Medieval Art F (3-0) [0.50]**

This course considers visual arts during a period when the Christian church built a new synthesis out of the legacies of the late Roman Empire and its “barbarian invaders”.

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Department(s):* School of Fine Art and Music

**ARTH*2550 The Italian Renaissance W (3-0) [0.50]**

This course will investigate the art, architecture, and visual and material culture of Renaissance Italy in its political, social, religious, intellectual and theoretical contexts. Topics can include artistic training and practice; methods, materials and techniques of art-making; science and perspective; patronage; collectors and collecting; public monuments and domestic art; Renaissance theory; humanism; artistic biography; and other thematic contexts.

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Department(s):* School of Fine Art and Music

**ARTH*2580 Late Modern Art: 1900-1950 F (3-0) [0.50]**

This is a study of the historical avant-gardes in the social and political contexts of the period 1900-1950.

*Offering(s):* Offered in even-numbered years.

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Department(s):* School of Fine Art and Music

**ARTH*2600 Early Modern Art W (3-0) [0.50]**

This course is a study of visual culture as it was transformed by the revolutions - industrial, political, and colonial - of the eighteenth and nineteenth centuries.

*Prerequisite(s):* 2.00 credits or (ARTH*1510 or ARTH*1520)

*Department(s):* School of Fine Art and Music
ARTH*2950 Baroque Art W (3-0) [0.50]
The visual arts in an age of religious crisis and the growth of great trading empires will be examined.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 2.00 credits or (ARTH*1510 or ARTH*1520)
Department(s): School of Fine Art and Music

ARTH*3010 Contemporary Canadian Art F (3-0) [0.50]
The wide range of contemporary Canadian visual arts, from painting to newly technologized media, from 'high' culture to punk, will be examined in the context of specifically Canadian social and historical conditions during the modern and post-modern periods.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 7.50 credits or 1.50 credits in Art History.
Department(s): School of Fine Art and Music

ARTH*3060 Public Art W (3-0) [0.50]
This course explores the ideas, designs and processes of artworks and projects conceptualized to be situated or staged in public spaces. The objective of this course is to identify and investigate the contexts surrounding selected works of public art, which may include media works, sculpture, and landscape installation, from a global perspective.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 7.50 credits or 1.50 credits in Art History.
Department(s): School of Fine Art and Music

ARTH*3150 Space: Roman Art and Urbanism W (3-0) [0.50]
Roman art and urbanism from the Early Republic to the end of the imperial period. The course will survey the developments of Roman art with an emphasis in architecture, sculpture and painting. It will illuminate the development of the urban space in the context of cultural, social and political life. (Also listed as CLAS*3150).
Offering(s): Offered in even-numbered years.
Enterprise(s): CLAS*3150
Restriction(s): ARTH*3530, ARTH*4500
Department(s): School of Fine Art and Music

ARTH*3200 Colour: Practice & Meanings in Western Art F (3-0) [0.50]
This course explores the role colour has played in the work of selected artists and periods.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 7.50 credits or 1.50 credits in Art History.
Department(s): School of Fine Art and Music

ARTH*3210 Critical Issues in Art History W (3-0) [0.50]
This course will provide an in-depth examination of the critical issues driving contemporary art. Though the specific topic will vary, the goal of this course is to establish a facility with the fundamental terms by which to analyze the cultural, economic, technological and visual conditions that shape the artworks of our time.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 7.50 credits or 1.50 credits in Art History, including ARTH*2480.
Department(s): School of Fine Art and Music

ARTH*3220 Nationalism & Identity in Art F (3-0) [0.50]
This course considers issues of identity formation and representation as they intersect with the agendas and interests of the nation state. The course looks at questions of power and exclusion, theories of representation and notions of centre/periphery, cultural hybridity and border-crossing in the age of globalization. It will examine the representation of identity in cultural institutions (including museums, and international art events) in cultural policy, and in cultural forms (fine art and popular culture, journals and periodicals).
Offering(s): Offered in even-numbered years.
Prerequisite(s): 7.50 credits or 1.50 credits in Art History.
Department(s): School of Fine Art and Music

ARTH*3320 Lives: Aspects of Western Art W (3-0) [0.50]
This course examines how the theory and practice of art history has often been informed by biography and other constructions of stereotypes and social practices concerning the ‘Artist’, the artist’s audiences, and the various contexts that inform artists’ lives, real and imagined.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 7.50 credits or 1.50 credits in Art History.
Department(s): School of Fine Art and Music

ARTH*3330 Display: Visual Culture in Western Europe W (3-0) [0.50]
This course examines the role of images in sacred and secular contexts: manuscripts, reliquaries, architectural sculpture, tapestries, and liturgical display in Romanesque and Gothic Europe.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 7.50 credits or 1.50 credits in Art History.
Department(s): School of Fine Art and Music

ARTH*3340 Studies in Renaissance and Baroque Art F (3-0) [0.50]
This course considers selected topics in the Renaissance and/or Baroque period(s), with emphasis on the political, social, economic, gendered, and aesthetic meanings of works of art.
Prerequisite(s): 7.50 credits or 1.50 credits in Art History.
Department(s): School of Fine Art and Music

ARTH*3460 English Art, 1750 to Present F (3-0) [0.50]
In conjunction with the London Semester, this course will survey the visual arts in England from the mid-18th century to the present. Visits to galleries, museums, libraries, studios, and other cultural institutions will supplement lectures and stress the experience of actual works of art.
Prerequisite(s): Admission to London Semester
Department(s): School of Fine Art and Music

ARTH*3520 Idea: Art Since 1950 F (3-0) [0.50]
This course provides an analysis of the visual arts of painting, sculpture, photographic media and non-traditional media World War II to the present. Selected artists of North America and Western Europe will be considered, as well as the institutions of the art world.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 7.50 credits or 1.50 credits in Art History.
Department(s): School of Fine Art and Music

ARTH*3600 Topics in the Long Eighteenth Century W (3-0) [0.50]
This course examines themes and issues in European art and visual culture of the long eighteenth century (1680s-1830s) through case-studies in select national, regional and/or global contexts that engage with artists’ careers, institutions related to artistic practice, and relevant theoretical and critical discourses.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 7.50 credits or 1.50 credits in Art History.
Restriction(s): ARTH*3310
Department(s): School of Fine Art and Music

ARTH*3620 Museum Studies F (0-0) [0.50]
This seminar course will be offered in conjunction with the staff and facilities of the Gallery of Guelph and will deal with historical matters relating to the role of the art museum in western life and the critical day-to-day management of a contemporary one. Students will participate, when possible, in the preparation of a current or forthcoming exhibition in the Gallery.
Prerequisite(s): 7.50 credits or 1.50 credits in Art History.
Restriction(s): ARTH*4620.
Department(s): School of Fine Art and Music

ARTH*3780 Gender and Art W (3-0) [0.50]
This course considers how the practice and reception of the visual arts intersect with constructs of gender in contemporary and historical contexts.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 10.00 credits including 2.00 credits in Art History.
Department(s): School of Fine Art and Music

ARTH*4310 Topics in Art & Visual Culture I W (3-0) [1.00]
This seminar course is designed to explore one or more issues in Art and Visual Culture depending on the expertise of the instructor. Students should consult the department for specific offerings.
Prerequisite(s): 10.00 credits including 1.00 credits in Art History at the 3000 level.
Department(s): School of Fine Art and Music

ARTH*4320 Topics in Art & Visual Culture II F (3-0) [1.00]
This seminar course is designed to explore one or more issues in Art and Visual Culture depending on the expertise of the instructor. Students should consult the department for specific offerings.
Prerequisite(s): 10.00 credits including 1.00 credits in Art History at the 3000 level.
Department(s): School of Fine Art and Music
### ARTH*4330 Topics in Art & Visual Culture III W (3-0) [1.00]
This seminar course is designed to explore one or more issues in Art and Visual Culture depending on the expertise of the instructor. Students should consult the department for specific offerings.

**Prerequisite(s):** 10.00 credits including 1.00 credits in Art History at the 3000 level.
**Department(s):** School of Fine Art and Music

### ARTH*4340 Topics in Art & Visual Culture IV F (3-0) [1.00]
This seminar course is designed to explore one or more issues in Art and Visual Culture depending on the expertise of the instructor. Students should consult the department for specific offerings.

**Prerequisite(s):** 10.00 credits including 1.00 credits in Art History at the 3000 level.
**Department(s):** School of Fine Art and Music

### ARTH*4350 Topics in Art & Visual Culture V F (3-0) [1.00]
This seminar course designed to explore one or more issues in Art and Visual Culture depending on the expertise of the instructor. Students should consult the department for specific offerings.

**Prerequisite(s):** 10.00 credits including 1.00 credits in Art History at the 3000 level.
**Department(s):** School of Fine Art and Music

### ARTH*4600 Individual Study - Art History S,F,W (3-0) [0.50]
Each student establishes, in consultation with the faculty member who has agreed to supervise the course, the content of this special study within the area of expertise of that instructor. Students should plan their project and submit their proposal to the Director of the School (or designate) by the last day of classes in the semester prior to the one which they plan to enroll in ARTH*4600.

**Prerequisite(s):** 14.00 credits, including 6 credits in Art History.
**Restriction(s):** Instructor consent required.
**Department(s):** School of Fine Art and Music

### ARTH*4800 Experiential Learning F,W (3-0) [0.50]
This course provides an opportunity for independent study based on Art History related voluntary or paid experience. Evaluation will be based on the student’s performance on related work assignments at the host institution as well as any assignments determined by the relevant instructor. Written proposals/rationales, signed by the appropriate instructor, must be submitted to the Director of the School for approval by the last day of course selection in the Fall (for Winter) or Winter (for the following Fall semester).

**Prerequisite(s):** A minimum of 14.00 credits including 2.50 credits in Art History.
**Restriction(s):** Registration is limited to students registered in BA:ARTH specializations with a minimum cumulative average of 70% in all Art History course attempts. Instructor consent required.
**Department(s):** School of Fine Art and Music
Arts and Sciences

Dean's Office, College of Arts

Registration in ASCI* courses is limited to students in the Bachelor of Arts and Sciences degree program.

ASCI*1110 Society and Inquiry I F (3-0) [0.50]

Through a series of historical and/or current case studies, this course introduces students to the ways in which social forces interact with inquiry. Students learn how to locate, present and critically evaluate evidence. This course also introduces students to the importance of good academic conduct and accountability in their work.

Equate(s): ASCI*1000
Restriction(s): Registration in the BAS degree program.
Department(s): Dean's Office, College of Arts

ASCI*1120 Society and Inquiry II W (3-0) [0.50]

Through a series of historical and/or current case studies, students will continue to explore the ways in which social forces shape inquiry. Students will learn to balance the weight of evidence from multiple sources and present those findings both orally and in writing.

Prerequisite(s): ASCI*1110
Equate(s): ASCI*1010
Restriction(s): Registration in the BAS degree program.
Department(s): Dean's Office, College of Arts

ASCI*2050 Uses of Knowledge F (3-0) [0.50]

This course explores the ways in which academic knowledge can be transferred, translated and mobilized to the world and used to remedy social problems. Through historical and/or current case studies and using the knowledge acquired in their two minors, students will learn to assess and defend conflicting points of view both in written and oral formats. Through group exercises, students will learn to work collaboratively and envisage themselves as engaged citizens.

Prerequisite(s): ASCI*1120
Equate(s): ASCI*2000
Restriction(s): Registration in the BAS degree program.
Department(s): Dean's Office, College of Arts

ASCI*3000 Arts and Sciences Community Project F (3-0) [0.50]

This course integrates the curricular, co-curricular and cross-disciplinary strands of the Arts and Sciences program through continued academic study and its application, modification, and critique in a community context. Students will conduct research and seminars on a selected topic while simultaneously completing a placement in a community agency appropriate to that topic. (See the B.A.S. program website for topics.)

Prerequisite(s): ASCI*2000 or ASCI*2050
Restriction(s): Registration in the BAS degree program.
Department(s): Dean's Office, College of Arts

ASCI*3100 Case Studies in Arts and Sciences Research W (3-0) [0.50]

This variable-content course introduces students to case studies in the integration of academic knowledge and practices with social movements, investigating the ways in which cultural, social, and scientific endeavours meet to work on real-world problems. The course may contain both historical and current case studies.

Prerequisite(s): ASCI*2000 or ASCI*2050
Restriction(s): Registration in the BAS degree program.
Department(s): Dean's Office, College of Arts

ASCI*3200 Issues in Public Health S (3-0) [0.50]

This course examines the practice of public health in Canada, and throughout the world, with an emphasis on the impact of social and political forces on matters relating to public health. As well, the course considers strategies for the delivery of initiatives to safeguard the health of the public.

Offering(s): Offered through Distance Education format only.
Prerequisite(s): 8.50 credits
Department(s): Dean's Office, College of Arts

ASCI*3700 Independent Studies in Arts/Sciences S,F,W (3-0) [0.50]

This course offers an opportunity for individual students to pursue unique curricular opportunities when they arise and are approved as appropriate to B.A.S. students (e.g., independent reading and/or research under a faculty member's supervision in a research lab or program; a course taken while studying on exchange or abroad; a course developed in conjunction with experiential learning situations, etc.). See the B.A.S. website for learning contracts and other requirements that must be completed well in advance to permit registration for independent studies.

Prerequisite(s): A minimum of 9.00 credits.
Restriction(s): Registration in the BAS degree program. Instructor consent required.
Department(s): Dean's Office, College of Arts

ASCI*4010 Arts and Sciences Honours Research Seminar W (3-0) [1.00]

Under faculty supervision students will devise and research a topic, and then plan, develop, peer-edit and complete a major paper. Designed to function as a senior-level writing seminar, this course is particularly recommended to students who plan to pursue graduate study and who have a cumulative average of at least 75%.

Prerequisite(s): 12.00 credits, including (1 of ASCI*3000, ASCI*3100, ASCI*3200, ASCI*3700); cumulative average of 75%
Restriction(s): ASCI*4000 Registration in the BAS degree program.
Department(s): Dean's Office, College of Arts

ASCI*4020 Topics in Arts and Sciences Research F,W (3-0) [0.50]

This variable-content course provides a senior-level seminar experience in the conduct, presentation, and writing of research relevant to the interdisciplinary core of the Bachelor of Arts and Sciences degree program. (See the B.A.S. website for topics.)

Prerequisite(s): 12.00 credits including (ASCI*2000 or ASCI*2050)
Restriction(s): Registration in the BAS degree program.
Department(s): Dean's Office, College of Arts

ASCI*4030 Topics in Arts and Sciences Research F,W (3-0) [0.50]

This variable-content course provides a senior-level seminar experience in the conduct, presentation, and writing of research relevant to the interdisciplinary core of the Bachelor of Arts and Sciences degree program. (See the B.A.S. website for topics.)

Prerequisite(s): 12.00 credits including (ASCI*2000 or ASCI*2050)
Restriction(s): Registration in the BAS degree program.
Department(s): Dean's Office, College of Arts

ASCI*4700 Independent Studies in Arts/Sciences S,F,W (3-0) [0.50]

This course continues work undertaken in ASCI*4700, and will normally be planned in concert with planning for ASCI*4700. This course offers an opportunity for individual students to pursue unique curricular opportunities when they arise and are approved as appropriate to B.A.S. students. See the B.A.S. website for learning contracts and other requirements that must be completed well in advance to permit registration for independent studies.

Prerequisite(s): ASCI*4700
Restriction(s): Registration in the BAS degree program. Instructor consent required.
Department(s): Dean's Office, College of Arts
### Biochemistry

#### BIOC*2580 Introduction to Biochemistry S,F,W (3-3) [0.50]
This course introduces students to the evolution, chemical structure, and biological roles of the major molecular components of the cell: including proteins, nucleic acids, lipids, and carbohydrates. Topics and processes integrated through understanding biological macromolecules include enzymology and intermediary metabolism, with emphasis on catabolic processes. Students will gain basic investigative skills through hands-on experiences in a laboratory setting.

**Prerequisite(s):** CHEM*1050  
**Department(s):** Department of Molecular and Cellular Biology

#### BIOC*3560 Structure and Function in Biochemistry S,F,W (3-0) [0.50]
This course develops the understanding of biochemical processes by examining the molecular mechanisms underlying the regulation of specific cellular and physiological systems. Examples may include: oxygen binding and transport; regulation of enzyme function; carbohydrate and lipid metabolic pathways and metabolic integration; structure of membranes and membrane proteins; and membrane transport and signaling.

**Prerequisite(s):** BIOC*2580  
**Department(s):** Department of Molecular and Cellular Biology

#### BIOC*3570 Analytical Biochemistry S,F (3-4) [0.75]
This course covers the tools and techniques by which biological molecules are isolated, separated, identified, and analyzed. Detailed discussion of experimental methods for macromolecule purification and characterization is included.

**Prerequisite(s):** (CHEM*2400 or CHEM*2480), BIOC*2580  
**Department(s):** Department of Molecular and Cellular Biology

#### BIOC*4520 Metabolic Processes F (3-0) [0.50]
This course is an in-depth study of the role of bioenergetics, regulation, and chemical mechanisms in carbohydrate, lipid, and nitrogen metabolism.

**Prerequisite(s):** BIOC*3560 or BIOC*3570  
**Department(s):** Department of Molecular and Cellular Biology

#### BIOC*4540 Enzymology W (3-3) [0.75]
This is a laboratory-intensive course where the topics studied include enzyme active sites and the mechanisms of enzyme action; enzyme kinetics and regulation; recombinant proteins and site-directed mutagenesis as tools for understanding enzymes.

**Prerequisite(s):** BIOC*3560 (may be taken concurrently), BIOC*3570  
**Department(s):** Department of Molecular and Cellular Biology

#### BIOC*4580 Membrane Biochemistry W (3-0) [0.50]
This course is a molecular examination of the structure and functions of cell membranes, cell surfaces and associated structures. Topics may include: membrane lipids; membrane protein structure; membrane transporters; ATP production; cytoskeleton; cell surface carbohydrates; membrane biogenesis; signal transduction.

**Prerequisite(s):** BIOC*3560 or BIOC*3570  
**Department(s):** Department of Molecular and Cellular Biology
**Biology**

*Department of Human Health and Nutritional Sciences*

*Department of Molecular and Cellular Biology*

*Department of Plant Agriculture*

**BIOL*1020 Introduction to Biology F (3-2) [0.50]**

This course will introduce concepts concerning the organization of life, from molecules to cells to ecosystems and discuss how they relate to day-to-day life. The dynamic and interactive nature of all living systems will be emphasized. The weekly tutorial will introduce students to the application of biology to daily life and emphasize critical thinking skills. This course will be valuable for students without Grade 12 or 4U Biology who are interested in environmental issues, medicine, agriculture, biodiversity and related topics.

**Restrictions:** BIOL*1050, BIOL*1070, BIOL*1080, BIOL*1090

**Department(s):** Department of Integrative Biology, Department of Molecular and Cellular Biology

**BIOL*1050 Biology of Plants & Animals in Managed Ecosystems F (3-2) [0.50]**

In this course students will investigate the biology of plants and animals in the context of agroecosystems and other managed ecosystems. Students will learn about the form and function of plants and animals and interactions between organisms and their environments. The course strongly emphasizes participatory and self-directed learning, problem solving, reasoning and exposure to primary research literature and will address key concepts in evolution, plant and animal structure, physiology and ecology. Students lacking Grade 12 or 4U Biology should consult with their program counsellor prior to taking BIOL*1050 in first semester.

**Department(s):** Department of Plant Agriculture, Department of Animal Biosciences

**BIOL*1070 Discovering Biodiversity F,W (3-0) [0.50]**

This course strongly emphasizes the development of learning and reasoning skills, an understanding of the nature of biological inquiry, and key concepts in evolution, ecology, and organismal biology. These include the meaning and significance of biodiversity and current issues surrounding it, the evolutionary processes through which biological diversity originates and is interrelated, the complexity of organisms and the importance of physical organization and regulatory processes, and the nature of interactions among organisms and between organisms and their biotic and abiotic environments. Students lacking Grade 12 or 4U Biology should consult with their program counsellor prior to taking BIOL*1070 in first semester.

**Department(s):** Department of Integrative Biology

**BIOL*1080 Biological Concepts of Health F,W (3-1) [0.50]**

This course will define the physiology of the individual as the biological foundation of health and focus on selected studies of health and illness in the adult human. Students will derive an understanding of the biological foundation of their own health as an adult and will be encouraged to expand the concepts and processes of individual health to human populations, animals and the environment. Through lectures, laboratories, small group tutorials and an individual research project, students will gain an introduction to research in the health sciences. Students lacking Grade 12 or 4U Biology should consult with their program counsellor prior to taking BIOL*1080 in first semester.

**Department(s):** Department of Human Health and Nutritional Sciences

**BIOL*1090 Introduction to Molecular and Cellular Biology F,W (3-0) [0.50]**

This course will foster an understanding of key concepts in molecular and cell biology and genetics including evolution, relationship between structure and function, energy and regulation, interrelatedness of life, and the nature of science. By relating these concepts to their daily lives, through analysis of problems and tutorial discussions, students will develop an understanding of five central themes: 1) all living things share common properties, 2) the cell is the fundamental functional unit of life, 3) managing energy is central to success, 4) genes are the fundamental information unit of life, and 5) heredity. Students lacking Grade 12 or 4U Biology should consult with their program counsellor prior to taking BIOL*1090 in first semester.

**Department(s):** Department of Molecular and Cellular Biology

**BIOL*1500 Humans in the Natural World F,W (3-0) [0.50]**

This course will examine past and present human interactions with Nature from an ecological perspective. It investigates current global issues that require multi-disciplinary environmental analysis.

**Offering(s):** Also offered through Distance Education format.

**Restriction(s):** Students in the BAS, BSC and BSC(ENV) program cannot take this course for credit.

**Department(s):** Department of Integrative Biology

**BIOL*2060 Ecology S,F,W (3-1) [0.50]**

This course discusses the ecology of plants, animals, fungi and bacteria as individual organisms, interacting populations, communities and ecosystems. Lectures and discussion groups are used to demonstrate the difficulty of interpreting ecological data derived from field studies. The value of laboratory-based research in ecology will also be discussed. The course will be important for anyone who wishes to understand what we know and need to know about the way ecological systems work.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** 4.00 credits including BIOL*1070

**Department(s):** Department of Integrative Biology

**BIOL*2300 Field Course in Biodiversity F (1-6) [0.50]**

This field course provides an opportunity for students to explore the biological diversity of a selected landscape from the perspectives of Western science and Indigenous culture. Students, working in collaboration with Indigenous peoples, will collect field samples using methods from Western scientific and Indigenous knowledge systems. Data will be analyzed to evaluate strengths and limitations of these methods and to examine factors affecting diversity and sustainable methods of land stewardship. Using knowledge gained, students will discuss and communicate their findings with diverse audiences.

**Prerequisite(s):** BIOL*1070

**Restriction(s):** Instructor consent required.

**Department(s):** Department of Integrative Biology

**BIOL*2400 Evolution F,W (4-0) [0.50]**

This course provides a broad overview of evolutionary biology. It examines the concepts and mechanisms that explain evolutionary change and the evolution of biological diversity at different levels of biological organization (gene to ecosystem) and across space and time. It also introduces historical forms of scientific inquiry, unique to biology. The course is designed to be of interest to students with general interests in science and in research in all areas of biology.

**Prerequisite(s):** BIOL*1070, BIOL*1090

**Department(s):** Department of Integrative Biology

**BIOL*3010 Laboratory and Field Work in Ecology F (0-6) [0.50]**

This course emphasizes field and laboratory work in ecology. Students will gain experience with experimental designs, sampling, analysis and interpretation of data collected to answer ecological questions. Local field sites will be used to run in-course experiments. Critical thinking about ecological issues relevant to society will be emphasized.

**Prerequisite(s):** BIOL*2060, (STAT*2400 or STAT*2230)

**Restriction(s):** Restricted to students in BSCH,WBC, BSES,ECOL, BSES ECOL:C, ECOL minor

**Department(s):** Department of Integrative Biology

**BIOL*3020 Population Genetics F (3-2) [0.50]**

This course is designed to explore the concepts of random mating, inbreeding, random drift, assortative mating and selection as they relate to natural populations. The dynamic genetic structure of populations and its relationship to the process of speciation is examined. The role and significance of molecular genetics as it relates to population genetics, evolution, systematics and phylogeny is also considered.

**Prerequisite(s):** MBG*2040

**Department(s):** Department of Integrative Biology

**BIOL*3040 Methods in Evolutionary Biology W (2-2) [0.50]**

This course will provide students with an understanding of some of the major analytical approaches used in modern evolutionary biology and an appreciation of the relevance of these methods to other branches of the life sciences. This includes the analysis of molecular data, phylogenetics and “tree thinking”, population genetics, genomics, phenotypic selection, experimental evolution, and hypothesis generation and testing in historical sciences. In addition to lectures, laboratory sessions will be devoted to practical training in analytical tools using specialized computer software and real datasets. Students will also be exposed to recent scientific literature and will undertake an independent project in order to experience these approaches in action.

**Prerequisite(s):** BIOL*2400

**Department(s):** Department of Integrative Biology
BIOL*3060 Populations, Communities & Ecosystems W (3-0) [0.50]
This course will explore advanced topics in ecology, building on the foundation provided by BIOL*2060. The course material will be organized around common mechanisms that link ecological processes across levels of organization, such as organism function, species interactions, spatial connectivity and energetic transfers across trophic levels. Emphasis will be on testing ecological theory with quantitative analysis of empirical data, thereby gaining greater depth of understanding of ecological processes at the population, community and ecosystem scales. Through the examination of case studies, students will apply ecological knowledge and quantitative analysis to problem solving in areas such as resource management, conservation of populations and communities, and predicting biosphere responses to climate change.
Prerequisite(s): 10.00 credits including BIOL*2060, (1 of GEOG*2460, STAT*2040, STAT*2600, STAT*2230)
Department(s): Dean's Office, College of Biological Science

BIOL*3130 Conservation Biology W (3-0) [0.50]
This course is an introduction to the biological basis for conserving wild, living resources, including freshwater and marine fish, plants and wild life. Topics to be covered include principles of population, community and landscape genetics and ecology relevant to the conservation, restoration and management of endangered species, ecosystems and/or renewable resources, including an introduction to the theory and practice of sustained-yield harvesting.
Prerequisite(s): BIOL*2060
Department(s): Department of Integrative Biology

BIOL*3300 Applied Bioinformatics W (3-2) [0.50]
This course covers current methods for making use of large molecular data sets to identify the genes that control traits, to characterize genes’ functions, and to infer genetic relationships among individuals. It focuses on case studies and current research in agriculture and medicine to introduce molecular data analysis methods, including analyzing molecular markers, constructing nucleotide and protein sequence alignments, constructing phylogenies, and finding motifs and genes in biological sequences. Lab sessions include an introduction to Unix and Perl for the biologist and hands-on use of several molecular data analysis programs.
Prerequisite(s): MBG*2040, STAT*2040
Department(s): Department of Plant Agriculture

BIOL*3450 Introduction to Aquatic Environments F (3-0) [0.50]
This course provides an introduction to the structure and components of aquatic ecosystems, how they are regulated by physical, chemical and biological factors, and the impact of humans on these environments and their biota.
Prerequisite(s): BIOL*1070, CHEM*1050, ZOO*2700 is strongly recommended
Department(s): Department of Integrative Biology

BIOL*3560 Applications in Biology W (3-0) [0.50]
In this course, students will explore selected topics related to the application of biological knowledge and techniques in society, such as biotechnology, forensic science, conservation biology, agriculture, health care, public health, and wildlife biology. Different topics are offered each year, reflecting the particular research or professional interest of the course instructor. Upcoming topics will be posted on the B.Sc. Advising website.
Prerequisite(s): 9.00 credits including (2 of BIOL*1070, BIOL*1080, BIOL*1090)
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular CBS programs or specializations depending on the selected topic during certain periods. Please refer to the BSC Advising Website.
Department(s): Dean's Office, College of Biological Science

BIOL*3660 Internship In Biological Science S,F,W (1-0) [0.50]
This course provides an opportunity for independent learning in the biological sciences within a work-related environment (volunteer or paid). Students will develop a project plan directly related to the work experience in consultation with an external organization. Using this experience, students will apply knowledge of scientific methodologies to develop a project that benefits the organization and society at large, apply disciplinary knowledge and project management skills to complete the project, and reflect on their own development and future career plans. Students interested in this course must submit a completed registration form, for approval by the course coordinator, as part of the registration process for this course.
Prerequisite(s): 7.50 credits, minimum cumulative average of 60%
Restriction(s): Majors offered by CBS. Instructor consent required.
Department(s): Dean's Office, College of Biological Science

BIOL*3670 Introduction to Wildlife Rehabilitation W (0-0) [0.50]
This course focuses on Canadian wildlife and ways to mitigate various human-animal interactions. There will be a specific emphasis on wildlife rehabilitation: its benefits, risks (to humans and animals), ethical concerns, principles of stabilization of sick and injured animals, and other key areas for consideration. Common presentations and underlying reasons for sick and injured animals that are admitted to a rehabilitation centre are presented. Whether in a wildlife centre or in the field, understanding important physiologic differences between species and how to stabilize animals for subsequent treatment by a permitted rehabilitation or a wildlife veterinarian are discussed.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 1 of ANSC*2340, BIOL*2060, BIOL*2400, ZOO*2090
Restriction(s): BIOL*3560
Department(s): Department of Integrative Biology

BIOL*3680 Wildlife Rehabilitation: Caring for Sick, Injured, and Orphaned Wildlife F (0-0) [0.50]
Wildlife rehabilitation is an important aspect of species protection and conservation, and a valuable career path for individuals with a special interest in wildlife biology. Content focuses on Canadian wildlife in terms of how to rehabilitate, triage, and stabilize sick, injured, and orphaned wildlife. Mitigating risk of illness and/or injury during the rehabilitation process will be discussed. This course helps prepare students to write the MNRF wildlife custodial authorization examination should they wish to pursue wildlife rehabilitation.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): BIOL*3670
Restriction(s): BIOL*3560
Department(s): Department of Integrative Biology

BIOL*4010 Adaptational Physiology W (3-0) [0.50]
This course examines adaptations of organisms to various aquatic and terrestrial environments. A mechanistic approach will be used to establish the strategies (anatomical, physiological, biochemical) of environmental adaptation. Examples will include adaptations of deep-sea and polar organisms, adaptations to salinity and desiccation challenges, oxygen availability, sensory adaptations and symbiotic adaptations.
Prerequisite(s): ZOO*3210 or ZOO*3620
Department(s): Department of Integrative Biology

BIOL*4020 Integrative Problems in Biological Science F,W (6-0) [1.00]
In this course, students work in teams to explore and address an authentic, biologically-based problem using an integrative and interdisciplinary approach. Topics are proposed by an external ‘client’ and will focus on a problem relating to societal needs (e.g., food, health, and environment), use of advanced technologies (e.g., genetic modification) or aspirations (e.g., sustainability). Students will explore the underlying basis for the problem, the current state of understanding, social implications, and develop a product or position to address the client’s needs.
Prerequisite(s): 14.00 credits
Restriction(s): Restricted to students in BSCH.BIOS
Department(s): Dean's Office, College of Biological Science

BIOL*4110 Ecological Methods F (3-3) [1.00]
This course will examine the theoretical and practical aspects of research methods in ecology. Emphasis will be placed on experimental design, sampling, population estimation, statistical inference, and characteristics of producers and consumers. Students will participate in research projects of their own design, and will gain experience in preparing research proposals, research papers and posters, and making oral presentations.
Prerequisite(s): BIOL*3010, BIOL*3060, (STAT*2040 or STAT*2230)
Restriction(s): Restricted to students in BSCH.WBC and Ecology majors/minors
Department(s): Department of Integrative Biology

BIOL*4120 Evolutionary Ecology W (4-0) [0.50]
This course is an examination of common ecological circumstances faced by plants and animals and the morphological, behavioral and life history characteristics that have evolved in response. Particular emphasis will be placed on evolutionary processes and on adaptive aspects of thermoregulation, foraging strategies, spatial distribution, social and reproductive strategies. The course will emphasize both the theoretical basis and the empirical evidence for ecological adaptation.
Prerequisite(s): BIOL*2060, BIOL*2400
Department(s): Department of Integrative Biology
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term(s)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL*4150</td>
<td>Wildlife Conservation and Management</td>
<td>F (3-0)</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOL*4350</td>
<td>Limnology of Natural and Polluted Waters</td>
<td>F (3-3)</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOL*4410</td>
<td>Field Ecology</td>
<td>F (3-3)</td>
<td>0.75</td>
</tr>
<tr>
<td>BIOL*4500</td>
<td>Natural Resource Policy Analysis</td>
<td>W (3-0)</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOL*4610</td>
<td>Arctic Ecology</td>
<td>F (1-6)</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOL*4700</td>
<td>Field Biology</td>
<td>S,F,W (1-6)</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOL*4710</td>
<td>Field Biology</td>
<td>S,F,W (1-6)</td>
<td>0.25</td>
</tr>
<tr>
<td>BIOL*4800</td>
<td>Field Biology</td>
<td>S,F,W (1-6)</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOL*4810</td>
<td>Field Biology</td>
<td>S,F,W (1-6)</td>
<td>0.25</td>
</tr>
</tbody>
</table>

This course builds on previous courses in population and community ecology to evaluate the long-term dynamics of threatened populations in the context of human intervention. The course will also provide a "hands-on" introduction to computer modeling, with application to contemporary issues in population ecology and resource management. Lectures will be drawn from the following topics: growth and regulation of populations, long-term persistence of ecological communities, harvesting, bio-economics, and habitat modification.

**Prerequisite(s):** BIOL*3060 or BIOL*3130

**Department(s):** Department of Integrative Biology

This course will familiarize students with the characteristics and methods of study of the limnology of natural and polluted aquatic ecosystems. The laboratory includes methods of biological, chemical and physical assessment such as field surveys of algal, macrophyte and benthic invertebrate diversity, toxicity assays, and analyses of stream flow.

**Prerequisite(s):** BIOL*3450

**Department(s):** Department of Integrative Biology

This is a 12-day field course held in Algonquin Park, Ontario, during August. Students independently conduct and write reports about 2 field projects that address the choice and design (in consultation with faculty members), on any of: vertebrate, invertebrate, or plant ecology, and/or behaviour, in terrestrial or aquatic habitats. Emphasis is placed upon students asking ecological questions, designing experiments, and then collecting data from intensive field work. There are no formal lectures, but an organizational meeting is held in the winter semester prior to the field course. The course is held by the field station for room and board and students will be responsible for their own transportation to and from the field station. A departmental application form must be submitted for approval by March. Signature of the course coordinator will be required to select the course. This course may be recorded as part of your Fall course selection and tuition and compulsory fees will be calculated accordingly. Students taking this course DO NOT use course numbers reserved for Ontario Universities Program in Field Biology. Detailed information is available from the Department of Integrative Biology.

**Prerequisite(s):** 0.50 credits in ecology

**Restriction(s):** Instructor consent required.

**Department(s):** Department of Integrative Biology

This course explores the role of science in management decision-making for Canadian renewable natural resources, including legal, political, social and economic factors. The course will rely on active learning by students working in collaborative groups, leading to deeper understanding of real-world issues while developing professional skills that are essential for those who wish to make significant contributions at the science-management interface. Four themes will be explored: 1) acts/policies/guidelines, 2) science and other knowledge systems, 3) management strategy evaluation, and 4) decision analysis & adaptive management.

**Prerequisite(s):** 15.00 credits including BIOL*4150

**Restriction(s):** Registration in Semester 7 or 8.

**Department(s):** Department of Integrative Biology

This three-week field course provides an opportunity to study the flora and fauna of marine, freshwater and terrestrial environments of the high Arctic. Based in the high Arctic, the course includes lectures, field exercises and student projects. An information session is held in January; students are required to register before March. Signature of the course coordinator is required for course selection. Students are responsible for cost of food and transportation. This course must be recorded as part of your Fall course selection and tuition and compulsory fees will be calculated accordingly. Students taking this course DO NOT use course numbers reserved for Ontario Universities Program in Field Biology. Detailed information is available from the Department of Integrative Biology.

**Offering(s):** Offered in even-numbered years.

**Prerequisite(s):** BIOL*2600

**Restriction(s):** Instructor consent required.

**Department(s):** Department of Integrative Biology

Students may apply for 2-week courses in the OUPFB (Ontario Universities Program in Field Biology). This program offers a diversity of field courses in biological subjects ranging from the Arctic to the Tropics, microbes to mammals, and covering marine, freshwater and terrestrial habitats. Costs include food and lodging and may include transportation. Detailed information is available from the Department of Integrative Biology.

**Prerequisite(s):** BIOL*2600

**Restriction(s):** Permission of the course coordinator. Instructor consent required.

**Department(s):** Department of Integrative Biology

Students may apply for 1-week courses in the OUPFB (Ontario Universities Program in Field Biology). This program offers a diversity of field courses in biological subjects ranging from the Arctic to the Tropics, microbes to mammals, and covering marine, freshwater and terrestrial habitats. Costs include food and lodging and may include transportation. Detailed information is available from the Department of Integrative Biology.

**Prerequisite(s):** BIOL*2600

**Restriction(s):** Permission of the course coordinator. Instructor consent required.

**Department(s):** Department of Integrative Biology

Students may apply for 1-week courses in the OUPFB (Ontario Universities Program in Field Biology). This program offers a diversity of field courses in biological subjects ranging from the Arctic to the Tropics, microbes to mammals, and covering marine, freshwater and terrestrial habitats. Costs include food and lodging and may include transportation. Detailed information is available from the Department of Integrative Biology.

**Prerequisite(s):** BIOL*2600

**Restriction(s):** Permission of the course coordinator. Instructor consent required.

**Department(s):** Department of Integrative Biology

Students may apply for 2-week courses in the OUPFB (Ontario Universities Program in Field Biology). This program offers a diversity of field courses in biological subjects ranging from the Arctic to the Tropics, microbes to mammals, and covering marine, freshwater and terrestrial habitats. Costs include food and lodging and may include transportation. Detailed information is available from the Department of Integrative Biology.

**Prerequisite(s):** BIOL*2600

**Restriction(s):** Permission of the course coordinator. Instructor consent required.

**Department(s):** Department of Integrative Biology
**XII. Course Descriptions, Biomedical Sciences**

**Biomedical Sciences**

*Department of Biomedical Sciences*

Some Biomedical Science courses are Priority Access Courses and enrollment may be restricted to particular programs or specializations. See department for more information.

Additional course listings may be found in the course descriptions for Toxicology and Veterinary Medicine.

**BIOM*3000 Functional Mammalian Neuroanatomy F (3-2) [0.50]**

The main objective of the course is to understand the functional organization of the mammalian nervous system. It includes a review of the major cell types found in the nervous system and an overview of the basic physiological principles of brain function followed by a detailed three dimensional and histological examination of the mammalian brain and spinal cord. Emphasis is placed on understanding the relationship between anatomy, physiology and behaviour.

Prerequisite(s): 1 of BIOM*3200, HK*3810, HK*3940, NEUR*2000, PHYS*2030, PSYC*2410, ZOO*3200, ZOO*3600

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the department of Biomedical Sciences website for more information.

Department(s): Department of Biomedical Sciences

**BIOM*3010 Biomedical Comparative Anatomy F (2-3) [0.50]**

This lecture and laboratory course is designed for students interested in the biomedical and health sciences. Labs provide an introduction to veterinary anatomy, with small and large animal dissections. Human and clinical veterinary anatomy, as well as biomechanical and functional differences are considered.

Prerequisite(s): 1 of BIOL*1070, BIOL*1080, BIOL*1090

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the department of Biomedical Sciences website for more information.

Department(s): Department of Biomedical Sciences

**BIOM*3040 Medical Embryology W (3-3) [0.75]**

The patterns and principles of normal embryonic and fetal development of mammals are covered with an emphasis on comparison to adult anatomy and medical implications. In laboratories, the teratology of prenatal anomalies are also examined. There is a focus on gathering embryological information and developing scientific reasoning skills through essays and presentations.

Prerequisite(s): (BIOL*1070, BIOL*1090), (1 of BIOL*1080, BIOM*3200, HK*3810, HK*3940), (1 of BIOM*3010, HK*3401, HK*3501, ZOO*2090)

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the department of Biomedical Sciences website for more information.

Department(s): Department of Biomedical Sciences

**BIOM*3090 Principles of Pharmacology S,F,W (3-0) [0.50]**

This course will introduce students to the basic principles of pharmacology. Topics to be covered include pharmacokinetics and drug-receptor interactions as well as the mechanism of action and toxicity of drugs acting on the cardiovascular and central nervous system.

Offering(s): Also offered through Distance Education format.

Prerequisite(s): BIOC*2580, (1 of ANSC*3080, BIOM*3200, HK*3810, HK*3940, ZOO*3200, ZOO*3600)

Department(s): Department of Biomedical Sciences

---

**BIOM*3200 Biomedical Physiology S,F,W (6-0) [1.00]**

This course focuses on the normal functioning of mammals. The physiology of the nervous, muscular, endocrine, reproductive, cardiovascular and digestive systems and homeostasis as reflected in respiratory and renal function is treated in a detailed manner. The integrative nature of various physiological systems is highlighted and cellular and molecular information is incorporated to enhance the understanding of these systems. Aspects of medically significant changes in the mammalian physiological systems are also introduced.

Offering(s): Also offered through Distance Education format.

Prerequisite(s): BIOC*2580

Restriction(s): HK*3810. This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the department of Biomedical Sciences website for more information.

Department(s): Department of Biomedical Sciences

**BIOM*3210 Critical Thinking in the Health Sciences F (3-0) [0.50]**

This course will explore a variety of issues related to the scientific ideals and practical realities of health sciences research and its clinical applications. Topics will include critical thinking, critical appraisal of the medical literature, the principles of evidence based medicine, and selected issues related to scientific integrity.

Prerequisite(s): 7.50 credits including (1 of BIOL*1070, BIOL*1080, BIOL*1090)

Restriction(s): BIOC*4210

Department(s): Department of Biomedical Sciences

**BIOM*4030 Endocrine Physiology W (3-0) [0.50]**

The course is designed to provide a senior level introduction to the endocrine discipline, focusing largely on mammals, with some examples taken from other vertebrate taxa. The course will give an introduction to the historical developments in the discipline, explore the actions of hormones and other chemical signalling pathways, and examine processes of hormone synthesis and secretion. The focus of the course will be the integrative nature of hormone actions in the regulations of various physiological processes in animal systems, such as metabolic control, growth, and reproduction. The course will also explore aspects of "non-classical" endocrinology, endocrine dysfunctional states and emerging environmental concerns related to endocrine dysfunction.

Prerequisite(s): BIOC*2580, (1 of BIOM*3200, HK*3810, HK*3940, ZOO*3200, ZOO*3600)

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the department of Biomedical Sciences website for more information.

Department(s): Department of Biomedical Sciences

**BIOM*4050 Biomedical Aspects of Aging W (3-0) [0.50]**

Aging is accompanied by alterations in the physiological and biochemical functioning of body organ systems. The relationship between aging and the cardiovascular, respiratory, digestion/nutrition and reproductive systems will be discussed as well as homeostatic functions associated with bone metabolism and fluid balance.

Prerequisite(s): 1 of BIOM*3200, HK*3810, HK*3940

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the department of Biomedical Sciences website for more information.

Department(s): Department of Biomedical Sciences

**BIOM*4070 Biomedical Histology F (2-3) [0.50]**

This histology course is designed for students interested in biomedical sciences. Basic tissue types and major organ systems of mammals will be examined using virtual microscopy. Lectures and discussions will focus on the relationship of tissue structure to cell and organ functions and the effects of injury or disease on microscopic structure.

Prerequisite(s): (MCB*2050 or MCB*2210), (1 of ANSC*3080, BIOM*3200, HK*3810, HK*3940)

Restriction(s): ZOO*3000 This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

Department(s): Department of Biomedical Sciences

**BIOM*4090 Pharmacology S,F,W (3-0) [0.50]**

Topics covered in this course include drugs used in the treatment of inflammatory, allergic, hormonal, infectious, neoplastic and hemorrhagic/thromboembolic disease. The focus will be on drug targets and mechanisms of action that explain therapeutic and toxicological effects.

Offering(s): Also offered through Distance Education format.

Prerequisite(s): BIOM*3090

Department(s): Department of Biomedical Sciences
**BIOM*4110 Mammalian Reproductive Biology W (2-2) [0.50]**

This multidisciplinary course provides an introduction to various aspects of mammalian reproduction of medical and veterinary significance. The course will cover the normal physiology and gross and micro anatomy of the female and male reproductive systems. Placentation, pregnancy and post-partum physiology will also be addressed. The impact of the reproductive biology on social and economic issues will be discussed.

**Prerequisite(s):**
1. BIOM*3010, HK*3401, HK*3501, ZOO*2090
2. BIOM*3200, HK*3810, ZOO*3210, ZOO*3620

**Department(s):** Department of Biomedical Sciences

**BIOM*4150 Cancer Biology W (5-0) [0.50]**

The main objective of this course is to familiarize students with general concepts in cancer biology. Each topic is presented as an overview, emphasizing recent developments in the field. There is additional focus on developing scientific skills, including critical analysis of current literature and the ability to give logical and concise oral presentations.

**Prerequisite(s):**
- MCB*2040, MCB*2050
- BIOM*3040, BIOM*4070, ZOO*3000

**Department(s):** Department of Biomedical Sciences

**BIOM*4180 Cardiology W (3-0) [0.50]**

This course will explore the concepts and principles of normal heart function, with a focus on the molecular and cellular basis of cardiac physiology. These elements will be further developed by examining changes that occur in a range of cardiovascular diseases and conditions.

**Prerequisite(s):**
- BIOM*3200, HK*3810, HK*3940
- BIOM*3010, HK*3401, HK*3501, ZOO*2090

**Restriction(s):**
- Registration in the BSC.BIOM Major

**Department(s):** Department of Biomedical Sciences

**BIOM*4300 Biomedical Communications F (3-0) [0.50]**

The primary purpose of this course is to develop students' ability to communicate scientific information logically and concisely, in written and oral formats. Students will be taught the basic principles underlying logical development of scientific arguments and hypotheses. Using practical examples drawn from current scientific literature, students will be exposed to the methods currently used by scientists in researching their subjects and writing about them in an effective fashion. Through written and oral presentation assignments, students will develop the skills necessary to confidently develop scientific presentations and communicate their knowledge and ideas to others.

**Prerequisite(s):**
- BIOL*1080, STAT*2040

**Restriction(s):**
- Restricted to students in BSCH: BIOM

**Department(s):** Department of Biomedical Sciences

**BIOM*4500 Literature-based Research in Biomedical Sciences S,F,W (0-6) [0.50]**

This course involves independent literature research of a current topic in any of the biomedical sciences (such as anatomy, physiology, pharmacology, toxicology, genetics, biochemistry). Students will present critical appraisals of primary research literature and are required to submit an annotated bibliography and research proposal in addition to their publication-quality literature review paper. Students work under the supervision of individual faculty. Faculty consent must be obtained prior to being admitted into the course by the course coordinator.

**Prerequisite(s):**
- 12.00 credits

**Restriction(s):**
- Enrolment restricted to BSC.BIOM majors or BSC.NEUR minors.

**Department(s):** Department of Biomedical Sciences

**BIOM*4510 Research in Biomedical Sciences S,F,W (0-12) [1.00]**

In this course students will conduct an extensive individual research project on a current topic in any of the biomedical sciences (such as anatomy, physiology, pharmacology, toxicology, genetics, biochemistry). Students work under the supervision of individual faculty. Students are required to submit an annotated bibliography and research proposal in addition to their publication-quality literature review paper. Students work under the supervision of individual faculty. Faculty consent must be obtained prior to being admitted into the course by the course coordinator.

**Prerequisite(s):**
- 14.00 credits

**Restriction(s):**
- Enrolment restricted to BSC.BIOM majors.

**Department(s):** Department of Biomedical Sciences

**BIOM*4521 Research in Biomedical Sciences F (0-12) [1.00]**

This is the second part of the two-semester course BIOM*4521/2. Refer to BIOM*4521/2 for the complete course description.

**Prerequisite(s):**
- BIOM*4510 Instructor consent required. This is a Priority Access Course. Enrolment may be restricted to particular programs. See department for more information.

**Department(s):** Department of Biomedical Sciences

**BIOM*4521/2 Research in Biomedical Sciences F-W [2.00]**

In this course, students will conduct an extensive individual research project on a current topic in any of the biomedical sciences (such as anatomy, physiology, pharmacology, toxicology, genetics, biochemistry). Students work under the supervision of individual faculty. Students are required to submit an annotated bibliography and research proposal in addition to their publication-quality literature review paper. Students work under the supervision of individual faculty. Faculty consent must be obtained prior to being admitted into the course by the course coordinator.

**Prerequisite(s):**
- 14.00 credits

**Restriction(s):**
- BIOM*4510 Instructor consent required. This is a Priority Access Course. Enrolment may be restricted to particular programs. See department for more information.

**Department(s):** Department of Biomedical Sciences
### Botany

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT*1200</td>
<td>Plants and Human Use W (3-0)</td>
<td>0.50</td>
<td>Department of Plant Agriculture</td>
</tr>
<tr>
<td>BOT*2000</td>
<td>Plants, Biology and People W (3-0)</td>
<td>0.50</td>
<td>Department of Plant Agriculture</td>
</tr>
<tr>
<td>BOT*2100</td>
<td>Life Strategies of Plants F,W (3-3)</td>
<td>0.50</td>
<td>Department of Molecular and Cellular Biology</td>
</tr>
<tr>
<td>BOT*3050</td>
<td>Plant Functional Ecology F (3-3)</td>
<td>0.50</td>
<td>Department of Molecular and Cellular Biology</td>
</tr>
<tr>
<td>BOT*3310</td>
<td>Plant Growth and Development W (3-3)</td>
<td>0.50</td>
<td>Department of Integrative Biology</td>
</tr>
<tr>
<td>BOT*3410</td>
<td>Plant Anatomy F (3-3)</td>
<td>0.50</td>
<td>Department of Molecular and Cellular Biology</td>
</tr>
<tr>
<td>BOT*3710</td>
<td>Plant Diversity and Evolution W (3-3)</td>
<td>0.50</td>
<td>Department of Integrative Biology</td>
</tr>
</tbody>
</table>

**BOT*1200 Plants and Human Use W (3-0) [0.50]**

This course will examine past and present interactions between humans and plants with emphasis on major changes in civilization and cultures as a result of these interactions. The approach will be to consider several case studies of how unique structural and chemical properties of various plant organs have played a role in their use by humans. Not an acceptable course for students in B.SC. Biological Sciences Programs, B.A.S. Program, B.SC. (ENV.) or B.SC. (AGR.) Programs.

**Restriction(s):**

- BIOL*1050

**Department(s):**

- Department of Plant Agriculture

---

**BOT*2000 Plants, Biology and People W (3-0) [0.50]**

The course deals with the biology of plant species of historical and cultural importance. It will focus on plants used as a source of drugs, herbal medicines, industrial raw materials, food products, perfumes and dyes. Examples of plant products that will be looked at include cocaine, chocolate, tea, opium, hemp and ginseng. The relevant morphology, physiology, distribution and ethnobotany of these plant species will be discussed.

**Offering(s):**

- Also offered through Distance Education format.

**Prerequisite(s):**

- BIOL*1050 or BIOL*1070

**Restriction(s):**

- BOT*1200

**Department(s):**

- Department of Plant Agriculture

---

**BOT*2100 Life Strategies of Plants F,W (3-3) [0.50]**

This course introduces the structures and processes used by plants in the greening of our planet, and how and why plants are basic to the functioning of the biosphere. This course includes hands-on experience in examining the cells, tissues and architectures of plants as well as selected processes of plant function.

**Prerequisite(s):**

- 2 of BIOL*1050, BIOL*1070, BIOL*1080, BIOL*1090

**Department(s):**

- Department of Molecular and Cellular Biology

---

**BOT*3050 Plant Functional Ecology F (3-3) [0.50]**

This course integrates fundamental and applied aspects of plant ecology, focusing on the roles of functional traits, physiological mechanisms, life history strategies, abiotic constraints, and biotic interactions in influencing plant distribution and abundance. Specific topics include physiological ecology, growth and allocation patterns, influence of biotic and trophic interactions (pollinators, pathogens, herbivores, competitors, mutualists, decomposers) on the structure and function of plant communities, and effects of global environmental change. Labs will include a field component that explores variation in functional aspects of plants. This course is especially valuable for students interested in plant or wildlife biology and environmental management.

**Prerequisite(s):**

- 7.50 credits including BIOL*1070

**Department(s):**

- Department of Integrative Biology

---

**BOT*3310 Plant Growth and Development W (3-3) [0.50]**

In this course the unique function and structure of plants is explored in relation to their growth, survival and adaptation to the environment. The control of growth and development by environmental and hormonal signals is explained through lectures and "hands-on" laboratories.

**Prerequisite(s):**

- BIOL*1090, (BIOL*1070 or BIOL*1080)

**Department(s):**

- Department of Molecular and Cellular Biology

---

**BOT*3410 Plant Anatomy F (3-3) [0.50]**

The intricate internal structure of plants is explored in this course. The development, pattern and significance of cells, tissues and organs will be emphasized as well as the histological and microscopical methods used to study them. The lab emphasizes interpretation of plant structure as it relates to function.

**Prerequisite(s):**

- 2 of BIOL*1070, BIOL*1080, BIOL*1090

**Department(s):**

- Department of Molecular and Cellular Biology

---

**BOT*3710 Plant Diversity and Evolution W (3-3) [0.50]**

This course integrates fundamental and applied aspects of plant evolution, focusing on the evolutionary history of plants, classification and identification, and hypotheses related to the evolution of plant form and life history. Specific topics include evolutionary processes in plants and evolution of physiological, reproductive, behavioural, and morphological traits. Labs will focus on methods and contemporary tools for phylogenetic reconstruction, comparative analyses, classification, and basic morphology/anatomy. This course is especially valuable for students interested in plant or wildlife biology and environmental management.

**Prerequisite(s):**

- 7.50 credits including BIOL*1070

**Department(s):**

- Department of Integrative Biology
### Business

**BUS*4550 Applied Business Project I S,F,W (3-0) [0.50]**

This is a project-based independent study course on a business issue for third or fourth year students in an agreed program of study with the instructor.

**Prerequisite(s):** 10.00 credits

**Restriction(s):** AGEC*4550, FARE*4550 Instructor consent required.

**Department(s):** Department of Management

---

**BUS*4560 Applied Business Project II S,F,W (3-0) [0.50]**

This course provides an opportunity to conduct a second independent study on a business issue for third or fourth year students in an agreed program of study with the instructor.

**Prerequisite(s):** BUS*4550

**Restriction(s):** AGEC*4560, FARE*4560 Instructor consent required.

**Department(s):** Department of Management
### XII. Course Descriptions, Chemistry

**Department of Chemistry**

**CHEM*1040 General Chemistry I F,W (3-3) [0.50]**

This course introduces concepts of chemistry, the central link between the physical and biological sciences. Principles discussed include chemical bonding, simple reactions and stoichiometry, chemical equilibria and solution equilibria (acids, bases, and buffers), and introductory organic chemistry.

**Prerequisite(s):** 4U Chemistry, (or equivalent) or CHEM*1060

**Department(s):** Department of Chemistry

**CHEM*1050 General Chemistry II F,W (3-3) [0.50]**

This course provides an introductory study of the fundamental principles governing chemical transformations: thermodynamics (energy, enthalpy, and entropy); kinetics (the study of rates of reactions); and redox/electrochemistry.

**Prerequisite(s):** CHEM*1040

**Department(s):** Department of Chemistry

**CHEM*1060 Introductory Chemistry F (3-0) [0.50]**

This course stresses fundamental principles of chemistry and is designed for students without Grade 12 or 4U Chemistry or equivalent. Topics include: atomic theory, the periodic table, stoichiometry, properties of gases and liquids, acid-base concepts and chemical equilibria. This course is intended only for students who require the equivalent of Grade 12 or 4U Chemistry in order to proceed to CHEM*1040.

**Offering(s):** Offered through Distance Education format only.

**Restriction(s):** CHEM*1040 Students in the BASC.AHN, BAS, BBRM.EM, BENG, BSAG, BSES and BSC programs cannot take this course for credit.

**Department(s):** Department of Chemistry

**CHEM*1100 Chemistry Today W (3-0) [0.50]**

This chemistry course for non-scientists will outline the involvement of chemistry in our daily lives and will provide an appreciation of chemistry from atoms to important complex molecules. Topics will include energy sources, air and water pollution, natural and synthetic polymers, household chemicals, foods, drugs and biochemicals.

**Offering(s):** Offered through Distance Education format only.

**Restriction(s):** CHEM*1040

**Department(s):** Department of Chemistry

**CHEM*2060 Structure and Bonding F (3-1.5) [0.50]**

This course covers the applications of symmetry, simple crystal structures and principles of bonding. Molecular orbital theory is used to explain the fundamental relationship between electronic and molecular structure. This course provides the elementary quantum background for an understanding of the electronic structures of atoms and molecules.

**Prerequisite(s):** CHEM*1050, IPS*1510 or (MATH*1210, 1 of PHYS*1010, PHYS*1070, PHYS*1300)

**Department(s):** Department of Chemistry

**CHEM*2070 Structure and Spectroscopy S,W (3-1.5) [0.50]**

This course provides an introduction to spectroscopy and its relationship to molecular structure and dynamics. Rotational, vibrational, electronic and magnetic resonance spectroscopies will be studied. Concepts introduced in CHEM*2060 will be applied to chemical and biochemical problems through spectroscopic techniques. Central to this course is the use of spectroscopy for the determination of molecular structures and the investigation of molecular motions.

**Prerequisite(s):** CHEM*2060

**Department(s):** Department of Chemistry

**CHEM*2400 Analytical Chemistry I S,F,W (3-6) [0.75]**

This course provides instruction in quantitative analysis of important inorganic species in solution by volumetric, gravimetric and spectrophotometric techniques. The students will utilize spreadsheet applications to study solution equilibria and data analysis. This course is intended to build the foundations of good analytical laboratory practice.

**Prerequisite(s):** CHEM*1050

**Restriction(s):** CHEM*2480 This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the department website for more information.

**Department(s):** Department of Chemistry

**CHEM*2480 Analytical Chemistry I S,F,W (3-3) [0.50]**

This course consists of a lecture portion that is the same as CHEM*2400 and a 3 hour laboratory component.

**Prerequisite(s):** CHEM*1050

**Restriction(s):** CHEM*2400 This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the department website for more information.

**Department(s):** Department of Chemistry

**CHEM*2700 Organic Chemistry I S,W (3-3) [0.50]**

This course provides an introduction to organic chemistry through the discussion of stereochemistry and major reaction mechanisms such as nucleophilic substitution and elimination, electrophilic addition, free radical reactions, electrophilic aromatic substitution, nucleophilic addition and nucleophilic acyl substitution.

**Prerequisite(s):** CHEM*1050

**Restriction(s):** This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations or semester levels during certain periods. Please see the department website for more information.

**Department(s):** Department of Chemistry

**CHEM*2820 Thermodynamics and Kinetics F (3-3) [0.50]**

This course examines the laws and applications of chemical thermodynamics and chemical kinetics.

**Prerequisite(s):** CHEM*1050, (1 of IPS*1510, MATH*1210, MATH*2080)

**Restriction(s):** CHEM*2880, PHYS*2240

**Department(s):** Department of Chemistry

**CHEM*2880 Physical Chemistry F (3-3.5) [0.50]**

This survey course is intended for students who are not specializing in chemistry or chemical physics. Topics include basic thermodynamics, chemical equilibrium, macromolecular binding, chemical kinetics, enzyme kinetics, transport processes, colligative properties and spectroscopy. This course describes macroscopic observable properties of matter in terms of molecular concepts.

**Prerequisite(s):** CHEM*1050, (1 of IPS*1500, MATH*1000, MATH*1080, MATH*1200)

**Restriction(s):** CHEM*2820

**Department(s):** Department of Chemistry

**CHEM*3360 Environmental Chemistry and Toxicology S,W (3-0) [0.50]**

This course examines the chemistry of the natural environment and the influence of pollutants upon the environment. Topics will include methods of introduction of pollutants to, and removal of pollutants from, the environment. (Also listed as TOX*3360.)

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** CHEM*1050

**Equate(s):** TOX*3360

**Department(s):** Department of Chemistry

**CHEM*3430 Analytical Chemistry II: Instrumental Analysis S,W (3-3) [0.50]**

This course examines methods for the separation, identification and quantification of substances in the solid, liquid and vapour states. Emphasis will be placed on modern instrumental methods and trace analysis.

**Prerequisite(s):** (CHEM*2400 or CHEM*2480)

**Restriction(s):** TOX*3300

**Department(s):** Department of Chemistry

**CHEM*3440 Analytical Chemistry III: Analytical Instrumentation F (3-3) [0.50]**

Analytical Instrumentation, data acquisition, processing and applications in Chemistry and Biological Chemistry.

**Prerequisite(s):** CHEM*3430

**Department(s):** Department of Chemistry

**CHEM*3640 Chemistry of the Elements I F (3-3) [0.50]**

A comprehensive introduction to concepts used by inorganic chemists to describe the structure, properties, and reactivity of compounds of the main group elements. The most important concepts covered are: Electronic Structure of Atoms, Symmetry, MO theory, Acids and Bases, Structure of Solids, Trends in the Periodic System.

**Prerequisite(s):** CHEM*2070

**Department(s):** Department of Chemistry

**CHEM*3650 Chemistry of the Elements II W (3-3) [0.50]**

The chemistry and structure of transition metal compounds; electronic spectral and structural properties of transition metal complexes; mechanisms of their substitution and redox reactions. Introduction to organometallic chemistry.

**Prerequisite(s):** CHEM*3640

**Department(s):** Department of Chemistry

Last Revision: July 4, 2019
CHEM*3750 Organic Chemistry II S,F (3-3) [0.50]
This course provides a general survey of fundamental aspects of organic chemistry, including the structure and properties of organic compounds. Topics also include an introduction to spectroscopic methods for the identification of organic compounds.

Prerequisite(s): CHEM*2700
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Chemistry

CHEM*3760 Organic Chemistry III W (3-3) [0.50]
This course provides an in-depth treatment of various aspects of organic chemistry. This will include such topics as the chemistry of heterocyclics, polar rearrangements, organic photochemistry, synthetic planning and a detailed discussion of organic spectroscopy.

Prerequisite(s): CHEM*3750
Department(s): Department of Chemistry

CHEM*3860 Quantum Chemistry F (3-1) [0.50]
This course provides an introduction to quantum chemistry and how it applies to the understanding of the electronic structure of atoms and molecules, as well as the geometric structure of molecules. The theoretical background needed to understand molecular spectroscopy is also provided. An integral part of this course is the use of commercial software for the computation of molecular properties.

Prerequisite(s): CHEM*2070, (MATH*2170 or MATH*2270)
Department(s): Department of Chemistry

CHEM*3870 Molecular Spectroscopy W (3-3) [0.50]
This course covers elementary group theory with applications to molecular spectroscopy and provides a continuation of the topics of rotational, vibrational and electronic spectroscopy and their applications in chemistry from CHEM*2070.

Offering(s): Offered in odd-numbered years.
Prerequisite(s): CHEM*3860, (MATH*2150 or MATH*2160)
Department(s): Department of Chemistry

CHEM*4010 Chemistry and Industry W (3-0) [0.50]
This course examines industrial processes for the production of organic and inorganic chemicals. The environmental impact and the challenges of a large-scale operation will be considered alongside the actual chemical processes involved.

Prerequisite(s): CHEM*2700, (CHEM*3430 or TOX*3300), (1 of IPS*1510, MATH*1210, MATH*2080)
Department(s): Department of Chemistry

CHEM*4400 Advanced Topics in Analytical Chemistry W (3-0) [0.50]
Recent developments in instrumental methods of chemical analysis. A typical selection will include topics from the areas of surface analysis and the applications of lasers in chemical analysis.

Prerequisite(s): CHEM*3430
Department(s): Department of Chemistry

CHEM*4620 Advanced Topics in Inorganic Chemistry F (3-0) [0.50]
This course provides a contemporary treatment of a subject of current interest in modern inorganic chemistry. Possible topics include solid state chemistry, main group chemistry and organometallic chemistry.

Prerequisite(s): CHEM*3650
Department(s): Department of Chemistry

CHEM*4630 Bioinorganic Chemistry W (3-0) [0.50]
This course covers the role and importance of transition metal systems in biological processes.

Offering(s): Offered in odd-numbered years.
Prerequisite(s): BIOC*2580, CHEM*3650
Co-requisite(s): CHEM*3650
Department(s): Department of Chemistry

CHEM*4720 Organic Reactivity W (3-0) [0.50]
This course is an introduction to physical organic chemistry, including discussion of reactive intermediates, substituent effects, medium effects, the mechanisms of organic reactions and the theoretical description of the bonding in organic molecules.

Offering(s): Offered in even-numbered years.
Prerequisite(s): CHEM*3760
Co-requisite(s): CHEM*3760
Department(s): Department of Chemistry

CHEM*4730 Synthetic Organic Chemistry F (3-0) [0.50]
This course provides an introduction to synthetic organic chemistry, including discussion of retrosynthetic analysis, modern synthetic methods, organic reaction, and syntheses of natural products. The integration of these topics for the rational design of synthetic schemes will also be discussed.

Prerequisite(s): CHEM*3750
Department(s): Department of Chemistry

CHEM*4740 Topics in Bio-Organic Chemistry F (3-0) [0.50]
This course covers the principles, methods and techniques of current bio-organic chemistry with emphasis on modern synthetic and analysis methods applied to biological molecules, a molecular based approach to structure recognition, and an introduction to molecular modeling and drug design.

Prerequisite(s): BIOC*2580, CHEM*3750
Department(s): Department of Chemistry

CHEM*4880 Topics in Advanced Physical Chemistry W (3-0) [0.50]
This course covers selected topics in advanced physical chemistry. Possible topics include statistical thermodynamics, advanced quantum chemistry, spectroscopy, and magnetic resonance.

Offering(s): Offered in even-numbered years.
Prerequisite(s): CHEM*2820 or PHYS*3240, CHEM*3860
Department(s): Department of Chemistry

CHEM*4900 Chemistry Research Project I S,F,W (0-12) [1.00]
This research project and seminar in chemistry is designed to provide senior undergraduates with an opportunity to conduct research in an area of chemistry. Students must make arrangements with both a faculty supervisor and the course coordinator prior to registration. Students cannot choose a supervisor with whom they already have research experience in another capacity (e.g. a summer research position). The project supervisor must be a faculty member of the Chemistry Department. Students should note that most projects are of two semesters duration, and should plan their studies on the expectation that they will also register in CHEM*4910 in a subsequent semester.

Prerequisite(s): 5.00 credits in chemistry including (1.50 credits from CHEM*3430, CHEM*3640, CHEM*3650, CHEM*3750, CHEM*3760, CHEM*3870)
Restriction(s): Instructor consent required.
Department(s): Department of Chemistry

CHEM*4910 Chemistry Research Project II S,F,W (0-12) [1.00]
This is a research project and seminar in chemistry. Students must make arrangements with both a faculty supervisor and the course coordinator prior to registration.

Prerequisite(s): CHEM*4900
Restriction(s): Instructor consent required.
Department(s): Department of Chemistry
### Chinese

**School of Languages and Literatures**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN*1200</td>
<td>Introductory Chinese I F (3-0) [0.50]</td>
<td></td>
<td>This introductory course in Mandarin Chinese provides the fundamentals of grammar, structure, and idiom, and due importance to the spoken language. This course is for students with no previous knowledge of the language. Restriction(s): Students with native or near-native ability in Chinese will not be admitted to this course. Department(s): School of Languages and Literatures</td>
</tr>
<tr>
<td>CHIN*1210</td>
<td>Introductory Chinese II W (3-0) [0.50]</td>
<td></td>
<td>This course, a continuation of CHIN<em>1200, emphasizes the application of basic grammatical structure in oral work and the comprehension of elementary reading texts. This course is intended for students who have only a basic knowledge of Mandarin Chinese. Students with basic knowledge of Chinese may seek instructor consent. Prerequisite(s): CHIN</em>1200 Department(s): School of Languages and Literatures</td>
</tr>
<tr>
<td>CHIN*1280</td>
<td>Conversational Chinese I F (3-0) [0.50]</td>
<td></td>
<td>The emphasis of this course is intensive practice of conversation and vocabulary acquisition in Mandarin Chinese. Restriction(s): This course is restricted to students who are not fluent in Mandarin Chinese. Department(s): School of Languages and Literatures</td>
</tr>
<tr>
<td>CHIN*1290</td>
<td>Conversational Chinese II W (3-0) [0.50]</td>
<td></td>
<td>This is a continuation of CHIN<em>1280. Additional emphasis will be given to the study of grammatical points in order to enhance listening and speaking skills. Students with basic knowledge of Chinese may seek instructor consent. Prerequisite(s): CHIN</em>1280 Restriction(s): This course is restricted to students who are not fluent in Mandarin Chinese. Department(s): School of Languages and Literatures</td>
</tr>
<tr>
<td>CHIN*2010</td>
<td>Chinese Language and Culture F (3-5) [1.00]</td>
<td></td>
<td>This language course provides the application of basic grammatical structures in relation to conversational Mandarin (Chinese). The course may include the comprehension of elementary reading texts. The course focuses on Chinese, as a language, and its relation to understanding the culture of China. This course is offered as part of the Shanghai Semester. Prerequisite(s): CHIN*1200 or equivalent Restriction(s): Admission to the Shanghai semester. Instructor consent required. Department(s): School of Languages and Literatures</td>
</tr>
<tr>
<td>CHIN*2200</td>
<td>Intermediate Chinese I F (3-0) [0.50]</td>
<td></td>
<td>This course supports the further development of the four basic language skills (speaking, writing, reading, and listening) acquired in previous Chinese Language courses and includes a survey of grammar, complex sentences and logical stress. Prerequisite(s): CHIN*1210 Restriction(s): Instructor consent required. Department(s): School of Languages and Literatures</td>
</tr>
<tr>
<td>CHIN*2210</td>
<td>Intermediate Chinese II W (3-0) [0.50]</td>
<td></td>
<td>This is a continuation of Intermediate Chinese I. Additional emphasis will be given to the study of Chinese characters and grammar. Prerequisite(s): CHIN*2200 Restriction(s): Instructor consent required. Department(s): School of Languages and Literatures</td>
</tr>
</tbody>
</table>
### Classical Studies

**School of Languages and Literatures**

Unless otherwise noted, these courses do not require a knowledge of the Greek or Latin languages.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Curriculum Year</th>
<th>Credit</th>
<th>Description</th>
<th>Offering</th>
<th>Prerequisite(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAS*1000</td>
<td>Introduction to Classical Culture</td>
<td>FW (3-0)</td>
<td>[0.50]</td>
<td>This course provides a wide-ranging look at essential features of Greek and Roman culture and society. Considerable emphasis will be given to the classical views of the human condition.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*2000</td>
<td>Classical Mythology</td>
<td>WS (3-0)</td>
<td>[0.50]</td>
<td>An examination of the nature and function of myth in Classical Antiquity. The course shows how the narrative and symbolic structure of myths orders individual and communal experience. The myths that have influenced Western civilization receive special emphasis.</td>
<td>Also offered through Distance Education format.</td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*2150</td>
<td>Western Art: Greece F</td>
<td>(3-0)</td>
<td>[0.50]</td>
<td>A survey of Ancient Greek Art and Archaeology, with stress on form and function plus stylistic trends and aesthetic values. The course will illuminate the cultural, social, and political life in Ancient Greece. (Also listed as ARTH*2150).</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*2350</td>
<td>The Classical Tradition</td>
<td>W (3-0)</td>
<td>[0.50]</td>
<td>This course examines the transmission of Graeco-Roman culture in circumstances radically different from those in which it originated. It highlights the aspects of classical culture most influential in forming the Western tradition.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3000</td>
<td>The Rise and Fall of Athens F</td>
<td>(3-0)</td>
<td>[0.50]</td>
<td>Greek history in the 5th century; the development of Athenian democracy; the Peloponnesian War and the decline of Athenian dominance. Special attention is paid to the historical tradition and thought of the period.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3010</td>
<td>The Roman Revolution</td>
<td>W (3-0)</td>
<td>[0.50]</td>
<td>An examination of the collapse of the Roman Republic and the development of the Imperial government under Augustus. The paradox of the external power and inner instability of Rome.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3020</td>
<td>History of the Hellenistic World</td>
<td>W (3-0)</td>
<td>[0.50]</td>
<td>The rise and fall of the Hellenistic states from the death of Alexander the Great until the Roman conquest, with political emphasis on the development of the monarchies and cultural emphasis on the Hellenization of the East.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3030</td>
<td>Epic Heroes and Poems</td>
<td>W (3-0)</td>
<td>[0.50]</td>
<td>The nature and significance of the epic hero. Epic as code and as critique of tradition. Oral poetry, and critical problems raised by it. The central texts are The Iliad, The Odyssey, and Virgil's Aeneid; other poems are also studied.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3040</td>
<td>Greek Tragedy and Comedy</td>
<td>W (3-0)</td>
<td>[0.50]</td>
<td>The nature of tragedy, and the existential and moral questions raised by the plays of Aischylos, Sophokes, and Euripides. Comedy, fantasy, and society in Aristophanes.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3050</td>
<td>The Rise and Fall of Athens (in Greek)</td>
<td>F (6-0)</td>
<td>[1.00]</td>
<td>This course augments CLAS*3000 for students of Greek through the reading and study of Greek of selected primary sources, such as Herodotus, Thucydides, and Plutarch.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3060</td>
<td>The Roman Revolution (in Latin)</td>
<td>W (6-0)</td>
<td>[1.00]</td>
<td>This course augments CLAS*3010 for students of Latin through the reading and study of Latin of selected primary sources, notably Sallust, Cicero, Caesar, and Suetonius.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3070</td>
<td>History of the Hellenistic World (in Greek)</td>
<td>F (6-0)</td>
<td>[1.00]</td>
<td>This course augments CLAS*3020 for students of Greek through the reading and study in Greek of selected books from the Iliad and/or Odyssey. The course will include close study of the epic dialect and features of its formulaic language.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3080</td>
<td>Epic Heroes and Poems (in Greek)</td>
<td>W (6-0)</td>
<td>[1.00]</td>
<td>This course augments CLAS*3030 for students of Greek through the reading in Greek of selected primary sources pertaining to the history of the Hellenistic World, primarily Polybius and Plutarch.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3090</td>
<td>Greek Tragedy and Comedy (in Greek)</td>
<td>W (6-0)</td>
<td>[1.00]</td>
<td>This course augments CLAS*3040 for students of Greek through the reading and study in Greek of selected primary sources pertaining to the history of the Hellenistic World, primarily Polybius and Plutarch.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3100</td>
<td>Religion in Greece and Rome</td>
<td>F (3-0)</td>
<td>[0.50]</td>
<td>An examination of the varieties of religious experience and of religious activity in Greece and Rome, before the establishment of Christianity. Particular attention is paid both to the relations of religion to state and to the relations of the individual to gods.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3120</td>
<td>Religion in Greece and Rome (in Latin)</td>
<td>F (6-0)</td>
<td>[1.00]</td>
<td>This course augments CLAS*3100 for students of Latin through the reading and study in Latin of selected primary sources. Notably Sallust, Cicero, Caesar, and Suetonius.</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>CLAS*3150</td>
<td>Space: Roman Art and Urbanism</td>
<td>W (3-0)</td>
<td>[0.50]</td>
<td>Introduction to Roman art and urbanism from the Early Republic to the end of the imperial period. The course will survey the developments of Roman art with an emphasis on architecture, sculpture and painting. It will illuminate the development of the urban space in the context of cultural, social and political life. (Also listed as ARTH*3150).</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
<td>Prerequisite(s)</td>
<td>Department(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
<td>------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLAS*3300</td>
<td>Directed Reading in Greek or Latin U (3-0) [0.50]</td>
<td>This course is designed for students of Greek or Latin who are seeking an enriched learning opportunity, through directed reading and/or research in the original language (Greek or Latin). Consult the Classical Studies faculty advisor for information about this opportunity.</td>
<td>[LAT<em>2000, (1 of CLAS</em>2350, CLAS<em>3010, CLAS</em>3100, CLAS<em>4000), or [GREK</em>2020, (1 of CLAS<em>3000, CLAS</em>3020, CLAS<em>3030, CLAS</em>3040)]</td>
<td>School of Languages and Literatures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLAS*3700</td>
<td>Experiential Learning and Language S,F,W (0-0) [0.50]</td>
<td>This course provides an opportunity for independent study based on an experiential project in Classical Studies. The project (approximately 70 hours) must be approved by a faculty member in the School of Languages and Literatures. It will include research about experiential learning, a reflective piece of writing and a public oral presentation about the project.</td>
<td>10.00 credits including 1.50 credits in Classics. A minimum cumulative average of 70% in all Classics course attempts.</td>
<td>School of Languages and Literatures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLAS*4000</td>
<td>Novel and Romance in Antiquity F (3-0) [0.50]</td>
<td>The historical and formal roots of fiction in the classical prose romances. Special attention is paid to the influence of myth, religion, historiography and ethical biography. Among texts studied are Daphnis and Chloe, Satyricon, and Aithiopika.</td>
<td>[CLAS<em>3030 or CLAS</em>3040]</td>
<td>School of Languages and Literatures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLAS*4010</td>
<td>Novel and Romance in Antiquity (in Latin) F (6-0) [1.00]</td>
<td>This course augments CLAS*4000 for students of Latin through the reading and study in Latin of an extant novel.</td>
<td>LAT*2000</td>
<td>School of Languages and Literatures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLAS*4150</td>
<td>Research Paper in Classics F,W (3-0) [0.50]</td>
<td>This course is intended to complement courses in specified studies in classics. It engages the student in research and in critical writing, and permits the examination, in depth, of a topic of importance to the discipline and of interest to the student.</td>
<td>1.50 credits in Classical Studies courses at the 3000 level</td>
<td>School of Languages and Literatures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLAS*4400</td>
<td>Seminar in Classics W (3-0) [0.50]</td>
<td>A seminar course complementing courses of specific study in classics. It seeks to define the nature of the discipline, its values and its procedures. Attention will be paid to recent methodological and ideological trends in the discipline.</td>
<td>1.50 credits in Classical Studies at the 3000 level</td>
<td>School of Languages and Literatures</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Computing and Information Science

Note: Credit may be obtained for 1 of CIS*1000 or CIS*1200. Students who major or minor in Computing and Information Science may not receive credit for the following courses unless taken to satisfy the requirements of another program: MATH*1050.

CIS*1000 Introduction to Computer Applications S,F,W (3-2) [0.50]
This course provides a survey of computer systems and software, including an introduction to computer programming, data organization and the social impact of computing. The course emphasizes application packages for personal and business use.
Offering(s): Offered through Distance Education format only.
Restriction(s): CIS*1200, Not available to students registered in BASC:AHN, BCOMP degree or a CIS minor.
Department(s): School of Computer Science

CIS*1200 Introduction to Computing F,W (3-2) [0.50]
This course covers an introduction to computer hardware and software, data organization, problem-solving and programming. The course includes exposure to application packages for personal and business use and is intended for students who wish to balance between programming and the use of software packages.
Offering(s): Offered through Distance Education format only.
Restriction(s): CIS*1000 Not available to students registered in a BCOMP degree or a CIS minor.
Department(s): School of Computer Science

CIS*1300 Programming F (3-2) [0.50]
This course examines the applied and conceptual aspects of programming. Topics may include data and control structures, program design, problem solving and algorithm design, operating systems concepts, and fundamental programming skills. This course is intended for students who plan to take later CIS courses. If your degree does not require further CIS courses consider CIS*1500 Introduction to Programming.
Restriction(s): CIS*1500 This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): School of Computer Science

CIS*1250 Software Design I F (3-2) [0.50]
This is an introductory course which involves a general overview of design and problem solving as it is practiced in different disciplines. The course will include an examination of the qualities of software as the end product of the design process. It will include a study of the pervasiveness of software, and the platform specific considerations. The course has an applied focus and will involve software design and development experiences in teams, a literacy component, and the use of software development tools.
Restriction(s): Restricted to students in BCOMP:CS and BCOMP:CS:C with 2.50 or fewer credits and to students in BCOMP:SENG and BCOMP:SENG:C.
Department(s): School of Computer Science

CIS*1500 Introduction to Programming F,W (3-1) [0.50]
This course introduces problem-solving, programming and data organization techniques required for applications using a general purpose programming language. Topics include control structures, data representation and manipulation, program logic, development and testing. This course is intended for students who do not intend to enrol in further CIS courses. If your degree requires further CIS courses, CIS*1300, is required.
Offering(s): Also offered through Distance Education format.
Restriction(s): CIS*1300 Not available to students registered in a BCOMP degree, a CIS minor, BEENG:CENG or BEENG:ESC.
Department(s): School of Computer Science

CIS*1910 Discrete Structures in Computing I F (3-2) [0.50]
This course is an introduction to discrete structures and formal methodologies used in computer science, including Boolean, algebra, propositional logic, predicate logic, proof techniques, set theory, equivalence relations, order relations, and functions.
Department(s): School of Computer Science

CIS*2030 Structure and Application of Microcomputers F (3-3) [0.50]
This course examines the components of a computer system, including memories, CPU, buses, and input/output subsystems and interface hardware. Programming of these systems is studied, including instruction sets, addressing modes, assembly/machine language programming, development of algorithms for data acquisition, display, and process control.
Prerequisite(s): CIS*1910, CIS*2500
Department(s): School of Computer Science

CIS*2050 Computers and Society S (3-0) [0.50]
Students in this course will investigate and study the social impacts of computing technology. The course will provide a brief introduction to ethics and the history of computing and the Internet. Additional content will focus on areas in which computers and information technology are having an impact on individuals and society including privacy, safety, freedom of speech, intellectual property, work, distribution of wealth, and the environment. This course is intended for students in any discipline.
Offering(s): Last offering - Summer 2019 Offered through Distance Education format only.
Restriction(s): CIS*3000 This course may not be taken for credit by students in the BCOMP:SENG majors.
Department(s): School of Computer Science

CIS*2170 User Interface Design W (3-2) [0.75]
This course is a practical introduction to the area of user interface construction. Topics include user interface components and their application, best practices for user interface design, approaches to prototyping, and techniques for assessing interface suitability.
Prerequisite(s): 1 of CIS*1200, CIS*1300, CIS*1500
Department(s): School of Computer Science

CIS*2250 Software Design II W (3-2) [0.50]
This course focuses on the process of software design. Best practices for code development and review will be examined. The software development process and tools to support this will be studied along with methods for project management. The course has an applied focus and will involve software design and development experiences in teams, a literacy component, and the use of software development tools.
Prerequisite(s): CIS*1250, CIS*1300
Restriction(s): Restricted to BCOMP:SENG majors.
Department(s): School of Computer Science

CIS*2430 Object Oriented Programming F (3-2) [0.50]
This course introduces the Object Oriented (OO) approach to programming and algorithm design. Topics will include the creation and use of objects from class libraries, user defined objects, inheritance, modularity, generic code, components, collections and containers, and an introduction to OO design methodologies.
Prerequisite(s): CIS*2500
Department(s): School of Computer Science

CIS*2460 Modelling of Computer Systems F (3-2) [0.50]
This course examines discrete simulation based on event queues and random number generation. Methods for generating input data, measuring and evaluating results using standard statistical tests are studied. Topics covered will include model calibration and validation, and algebraic, probabilistic and simple queueing models of software and hardware operation.
Prerequisite(s): CIS*2500, STAT*2040
Department(s): School of Computer Science

CIS*2500 Intermediate Programming W (3-2) [0.50]
In this course students learn to interpret a program specification and implement it as reliable code, as they gain experience with pointers, complex data types, important algorithms, intermediate tools and techniques in problem solving, programming, and program testing.
Prerequisite(s): CIS*1300
Department(s): School of Computer Science

CIS*2520 Data Structures F (3-2) [0.50]
This course is a study of basic data structures, such as lists, stacks, queues, trees, and tables. Topics which will be examined include abstract data types, sequential and linked representations, and an introduction to algorithm analysis; various traversal, search, insertion, removal, and sorting algorithms.
Prerequisite(s): CIS*2500, (1 of CIS*1910, ENGG*1500, MATH*2000)
Department(s): School of Computer Science
### XII. Course Descriptions, Computing and Information Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Department(s)</th>
<th>Prerequisite(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CIS*2750 Software Systems Development and Integration W (3-2) [0.75]</strong></td>
<td>This course introduces techniques and tools used in the development of large software systems. Students learn methods for organizing and constructing modular systems, manipulating files, introductory interface design, and use of databases. Software tools for managing projects, database connectivity, configuration management, and system application programmer interfaces are also covered.</td>
<td>School of Computer Science</td>
<td>CIS<em>2430, CIS</em>2520</td>
</tr>
<tr>
<td><strong>CIS*2910 Discrete Structures in Computing II W (3-2) [0.50]</strong></td>
<td>This course is a further introduction to discrete structures and formal methodologies used in computer science, including sequences, summations, recursion, combinatorics, discrete probability, and graph theory.</td>
<td>School of Computer Science</td>
<td>CIS<em>1300, (CIS</em>1910 or ENGG*1500)</td>
</tr>
<tr>
<td><strong>CIS*3050 Systems Programming F (3-1) [0.50]</strong></td>
<td>This course will familiarize students with system level interface tools and their common applications. The purpose, function, design and use of these tools will be explored, allowing students to determine where and when these tools are useful in software development projects. Tools examined in the course include loadable libraries, file system locking, signals, pipes, asynchronous reading/writing to files and memory, file system sockets, shared memory models, and hardware device properties and control.</td>
<td>School of Computer Science</td>
<td>CIS*3110</td>
</tr>
<tr>
<td><strong>CIS*3090 Parallel Programming F (3-1) [0.50]</strong></td>
<td>This course examines the current techniques for design and development of parallel programs targeted for platforms ranging from multicore computers to high-performance clusters, with and without shared memory. It includes theoretical models for, and hardware effects on, parallel computation, the definitions of speedup, scalability, and data- versus task-parallel approaches. The course will also examine strategies for achieving speedup based on controlling granularity, resource contention, idle time, threading overhead, work allocation, and data localization.</td>
<td>School of Computer Science</td>
<td>(CIS<em>2030 or ENGG</em>3640), CIS*3110</td>
</tr>
<tr>
<td><strong>CIS*3110 Operating Systems I W (3-1) [0.50]</strong></td>
<td>This course covers operating systems in theory and practice by focusing on the components in a system: scheduling, resource allocation, process management, multi-programming, multi-tasking, I/O control, file systems, and mechanisms for client-server computing using examples from contemporary operating systems.</td>
<td>School of Computer Science</td>
<td>CIS<em>2520, (CIS</em>2030 or ENGG*2410)</td>
</tr>
<tr>
<td><strong>CIS*3120 Digital Systems I W (3-2) [0.50]</strong></td>
<td>This course examines Boolean algebra, minimization of Boolean expressions, design of combinational and sequential logic circuits, memory design, control, ALU, bus design, microprogramming and CPU design.</td>
<td>School of Computer Science</td>
<td>CIS<em>1910, CIS</em>2500</td>
</tr>
<tr>
<td><strong>CIS*3150 Theory of Computation F (3-0) [0.50]</strong></td>
<td>This course explores the theory of computation including automata theory, Turing machines and their variants, formal languages, parsing, the Halting problem, undecidability, and NP-completeness.</td>
<td>School of Computer Science</td>
<td>CIS<em>2750, CIS</em>3490</td>
</tr>
<tr>
<td><strong>CIS*3190 Software for Legacy Systems W (0-0) [0.50]</strong></td>
<td>This course is an introduction to legacy software systems used in business, manufacturing, and engineering. Topics include COBOL programming, mainframe systems, and integration of legacy systems with contemporary computing systems.</td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*3210 Computer Networks F (3-1) [0.50]</strong></td>
<td>This course covers the high-level (protocol) oriented aspects of computer networks, specifically: application, session, transport and network layers. It includes the Internet, socket-level programming, multimedia and quality of service issues. The hardware aspects (switches, LANs, modems, transmission paths) are only covered at a functional level.</td>
<td>School of Computer Science</td>
<td>CIS*3110</td>
</tr>
<tr>
<td><strong>CIS*3250 Software Design III F (3-3) [0.50]</strong></td>
<td>This course will examine the historical development of design methodologies and working with legacy systems. It will include an examination of programming paradigms and trends in software design from the past and present. The course has an applied focus and will involve software design and development experiences in teams, a literacy component, and the use of software development tools.</td>
<td>School of Computer Science</td>
<td>CIS<em>2250, CIS</em>2500</td>
</tr>
<tr>
<td><strong>CIS*3260 Software Design IV F (3-3) [0.50]</strong></td>
<td>This course is a study of software architectures and system design methodologies. This will include advanced techniques for project management and experience evaluating software tools. The course has an applied focus and will involve software design and development experiences in teams, a literacy component, and the use of software development tools.</td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*3490 The Analysis and Design of Computer Algorithms W (3-2) [0.50]</strong></td>
<td>The design and analysis of efficient computer algorithms are studied. Topics which will be studied include: standard methodologies, asymptotic behaviour, optimality, lower bounds, implementation considerations, graph algorithms, matrix computations (e.g. Strassen's method), NP-completeness.</td>
<td>School of Computer Science</td>
<td>(CIS<em>1910 or (CIS</em>2910 and ENGG<em>1500)), CIS</em>2520</td>
</tr>
<tr>
<td><strong>CIS*3550 Data Base Systems and Concepts F (3-1) [0.50]</strong></td>
<td>This course is a study of data organization and data management principles with the perspective of analyzing applications suitable for implementation using a DBMS. This will include an analysis of several data base models, query specification methods, and query processing techniques. Overview of several related issues including concurrency control, security, integrity and recovery. Students will demonstrate concepts through project assignments.</td>
<td>School of Computer Science</td>
<td>CIS*2520</td>
</tr>
<tr>
<td><strong>CIS*3700 Introduction to Intelligent Systems W (3-1) [0.50]</strong></td>
<td>This course covers the core topics of Artificial Intelligence, namely: agents and environment, search, knowledge representation, reasoning, and learning. The last three topics are covered using logic as the common formalism for coherence. The course introduces a broad range of basic concepts, terminology, and applications, in addition to providing some specific, widely applicable methodologies.</td>
<td>School of Computer Science</td>
<td>(CIS<em>3750 or CIS</em>3760), (CIS<em>2460 or STAT</em>2040)</td>
</tr>
<tr>
<td><strong>CIS*3750 System Analysis and Design in Applications F,W (3-2) [0.75]</strong></td>
<td>This course is an introduction to the issues and techniques encountered in the design and construction of software systems, focusing on the theory and models of software evolution. Topics include requirements and specifications, prototyping, design principles, object-oriented analysis and design, standards, integration, risk analysis, testing and debugging.</td>
<td>School of Computer Science</td>
<td>CIS*2750</td>
</tr>
<tr>
<td><strong>CIS*3760 Software Engineering F,W (3-2) [0.75]</strong></td>
<td>This course is an examination of the software engineering process, the production of reliable systems and techniques for the design and development of complex software. Topics include object-oriented analysis, design modeling, software architectures, software reviews, software quality, software engineering, ethics, maintenance and formal specifications.</td>
<td>School of Computer Science</td>
<td>CIS*3750</td>
</tr>
<tr>
<td><strong>CIS*4010 Cloud Computing W (3-0) [0.50]</strong></td>
<td>This course introduces students to fundamentals of cloud computing and software development for cloud platforms. It covers topics such as virtualization, architecture of cloud systems, programming for the cloud, resource management, as well as privacy and security issues.</td>
<td>School of Computer Science</td>
<td>CIS*3110</td>
</tr>
</tbody>
</table>

---

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CIS*4020 Data Science F (3-1) [0.50]</strong></td>
<td>Data Science focuses on extracting the important relations in data. The course is intended as a survey of the discipline and focuses on applied computational methods for data analysis. Topics include algorithms, computational and machine learning methods, software tools, and modeling, as they apply to the analysis of and discovery in big data.</td>
<td></td>
</tr>
<tr>
<td><strong>Offering(s):</strong></td>
<td>Offered in odd-numbered years.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS<em>2750, MATH</em>1160, STAT*2040</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4030 Mobile Computing W (3-0) [0.50]</strong></td>
<td>This course introduces students to mobile computing and mobile application development. It examines mobile technology, application development, user interaction, data storage, and software tools.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS<em>2030, CIS</em>2750, CIS*3110</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4050 Digital Systems II F (3-1) [0.50]</strong></td>
<td>This course examines central processor architectures, control and microprogramming, memory systems, special architectures, underlying support for special architectures, architectures suitable for very large scale integration.</td>
<td></td>
</tr>
<tr>
<td><strong>Offering(s):</strong></td>
<td>Offered in even-numbered years.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS<em>3110, CIS</em>3120</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4150 Software Reliability and Testing F (2-2) [0.50]</strong></td>
<td>This course serves as an introduction to systematic methods of testing and verification, covering a range of static and dynamic techniques and their use within the software development process. Concepts such as defining necessary reliability, developing operational profiles, techniques to improve and predict software reliability, preparing and executing tests, black box testing, white box testing, unit testing, system testing, and integration testing will be explained.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS<em>3750 or CIS</em>3760</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4250 Software Design V W (0-6) [0.50]</strong></td>
<td>This is a capstone course which applies the knowledge gained from the previous Software Design courses to a large team project. The course has an applied focus and will involve software design and development experiences in teams, a literacy component, and the use of software development tools.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS<em>2750, CIS</em>3260</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4300 Human Computer Interaction F (2-2) [0.50]</strong></td>
<td>This course examines the methods for user interface software design, including interface representations and testing. Topics which will be studied include the evaluation and design of sample applications systems, impacts of computer-based information systems on individuals and organizations, implementation and testing tools, and planning of learning stages and design of assistance subsystems.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS<em>3110, (CIS</em>3750 or CIS*3760)</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4450 Special Topics in Information Science U (3-1) [0.50]</strong></td>
<td>A variety of advanced topics mainly from areas within general information processing. Subject areas discussed in any particular semester will depend on the interests of the students and the instructor. Students should check with the School of Computer Science to determine what topic will be offered during specific semesters and which prerequisites, if any, are appropriate.</td>
<td></td>
</tr>
<tr>
<td><strong>Restriction(s):</strong></td>
<td>Instructor consent required.</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4500 Special Topics in Computing Science U (3-1) [0.50]</strong></td>
<td>A variety of advanced topics within Computing Science. Subject areas discussed in any particular semester will depend upon the interests of both the students and the instructor. Students should check with the School of Computer Science to determine what topic will be offered during specific semesters and which prerequisites, if any, are appropriate.</td>
<td></td>
</tr>
<tr>
<td><strong>Restriction(s):</strong></td>
<td>Instructor consent required.</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4510 Computer Security Foundations F (3-2) [0.50]</strong></td>
<td>This course covers basic concepts and practices in computer and network security. This includes topics such as fundamental concepts of computer security, network security, threat landscape, threat intelligence and attack methods, ethical hacking concepts and other hacking techniques, security technology and security policies, and cloud security.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS<em>2120, CIS</em>4110</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4520 Introduction to Cryptography W (3-2) [0.50]</strong></td>
<td>This course is an introduction to the foundations of modern cryptography, with an eye toward practical applications. Topics covered include classical systems, information theory, mathematical background material, symmetric and asymmetric crypto-systems and their cryptanalysis, hash functions and message authentication (MAC), provable security, key-exchange and management, authentication and digital signatures. Importance of learning Cryptography in Digital Forensics will also be discussed.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS*3490</td>
<td></td>
</tr>
<tr>
<td><strong>Restriction(s):</strong></td>
<td>CIS*4110</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4650 Compilers W (3-1) [0.50]</strong></td>
<td>This course is a detailed study of the compilation process. Topics include interpreters, overall design implementation of a compiler, techniques for parsing, building and manipulating intermediate representations of a program, implementation of important features, code generation and optimization.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS<em>2030, CIS</em>3110, CIS*3150</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4720 Image Processing and Vision W (3-1) [0.50]</strong></td>
<td>This course is an introduction to the process of image processing. Emphasis is placed on topics such as image enhancement, segmentation morphological analysis, texture analysis, visualization and image transformations. Applications of image processing in medicine, forensics, food and security are surveyed.</td>
<td></td>
</tr>
<tr>
<td><strong>Offering(s):</strong></td>
<td>Offered in odd-numbered years.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS<em>2750, CIS</em>3110, (CIS<em>2460 or STAT</em>2040)</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4780 Computational Intelligence U (3-1) [0.50]</strong></td>
<td>This course introduces concepts of soft computing: modelling uncertainty, granular computing, neurocomputing, evolutionary computing, probabilistic computing and soft computing for software engineering.</td>
<td></td>
</tr>
<tr>
<td><strong>Offering(s):</strong></td>
<td>Offered in odd-numbered years.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>(CIS<em>3750 or CIS</em>3760), CIS<em>3490, (CIS</em>2460 or STAT*2040)</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4800 Computer Graphics W (3-1) [0.50]</strong></td>
<td>This course is an introduction to computer graphics. Topics include graphics programming concepts, geometrical transformations, viewing 3-D projections, raster graphics, sculptured surfaces, visible surface determination, image processing and other special topics. Practical issues will be covered by assignment using currently available graphics equipment.</td>
<td></td>
</tr>
<tr>
<td><strong>Offering(s):</strong></td>
<td>Offered in even-numbered years.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS<em>3750 or CIS</em>3760, CIS<em>3490, (CIS</em>2460 or STAT*2040)</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4820 Game Programming W (3-1) [0.50]</strong></td>
<td>This course will focus on the components found in modern 3-D game engines. It will emphasize the algorithms and data structures required to create real-time computer graphics, sound and network communications.</td>
<td></td>
</tr>
<tr>
<td><strong>Offering(s):</strong></td>
<td>Offered in odd-numbered years.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS<em>3110, (CIS</em>3750 or CIS*3760)</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4900 Computer Science Project S,F,W (0-6) [0.50]</strong></td>
<td>Planning, developing and writing a research proposal under individual faculty supervision. The course, in continuation with CIS*4910 provides senior undergraduates an opportunity to pursue an independent course of study. The topic selected will be determined by agreement between the student and the faculty member.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>7.00 credits in CIS</td>
<td></td>
</tr>
<tr>
<td><strong>Restriction(s):</strong></td>
<td>Instructor consent required.</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
<tr>
<td><strong>CIS*4910 Computer Science Thesis S,F,W (0-6) [0.50]</strong></td>
<td>This course is a continuation of CIS*4900. The student will conduct and write an undergraduate thesis under the individual supervision of a faculty member. In addition the student is required to present his/her work in a seminar and also participate in the critical analysis and review of the work of other students taking this course.</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CIS*4900</td>
<td></td>
</tr>
<tr>
<td><strong>Restriction(s):</strong></td>
<td>Instructor consent required.</td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>School of Computer Science</td>
<td></td>
</tr>
</tbody>
</table>
Co-operative Education

Co-operative Education & Career Services

COOP*XXXX courses are limited to students registered in a co-operative education program.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Offerings</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOP*1100</td>
<td>Introduction to Co-operative Education</td>
<td>1-0 [0.00]</td>
<td>Offered through Distance Education format only.</td>
<td>2.00 credits</td>
<td>Enrolment in a co-operative education program</td>
<td>Co-operative Education &amp; Career Services</td>
</tr>
<tr>
<td>COOP*1000</td>
<td>Co-op Work Term I</td>
<td>3-0 [0.50]</td>
<td></td>
<td>COOP*1100</td>
<td></td>
<td>Co-operative Education &amp; Career Services</td>
</tr>
<tr>
<td>COOP*2000</td>
<td>Co-op Work Term II</td>
<td>3-0 [0.50]</td>
<td></td>
<td>Completion of previous co-op work requirements in COOP*1000</td>
<td></td>
<td>Co-operative Education &amp; Career Services</td>
</tr>
<tr>
<td>COOP*3000</td>
<td>Co-op Work Term III</td>
<td>3-0 [0.50]</td>
<td></td>
<td>Completion of previous co-op work requirements in COOP*2000</td>
<td></td>
<td>Co-operative Education &amp; Career Services</td>
</tr>
<tr>
<td>COOP*4000</td>
<td>Co-op Work Term IV</td>
<td>3-0 [0.50]</td>
<td></td>
<td>Completion of previous co-op work requirements in COOP*3000</td>
<td></td>
<td>Co-operative Education &amp; Career Services</td>
</tr>
<tr>
<td>COOP*5000</td>
<td>Co-op Work Term V</td>
<td>3-0 [0.50]</td>
<td></td>
<td>Completion of previous co-op work requirements in COOP*4000</td>
<td></td>
<td>Co-operative Education &amp; Career Services</td>
</tr>
</tbody>
</table>

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
### Crop Science

#### CROP*3300 Grain Crops W (3-0) [0.50]
Management strategies and world production of the major temperate grain crops are studied relative to their botanical and physiological characteristics and to available environmental resources. The utilization of grain crops for human food, livestock feed, and various industrial products are examined.

**Prerequisite(s):** AGR*2050 or AGR*2470  
**Department(s):** Department of Plant Agriculture

#### CROP*3310 Protein and Oilseed Crops F (3-0) [0.50]
Management strategies and world production of the major temperate protein and oilseed crops are studied relative to their botanical and physiological characteristics and to available environmental resources. The utilization of protein and oilseed crops for human food, livestock feed and various industrial products are examined.

**Prerequisite(s):** AGR*2050 or AGR*2470  
**Department(s):** Department of Plant Agriculture

#### CROP*3340 Managed Grasslands F (3-2) [0.50]
Managed forage grasses and legumes provide grazing, cover crops, conserved feed, and a wider range of services to the environment and society at large. Agro-ecological, genetic, and managerial considerations will be integrated toward addressing questions of ruminant and equine production and environmental management. Forage species will be distinguished morphologically and physiologically, focusing on adaptation to climatic, edaphic, and managerial constraints and applications for horses, including weed and poisonous plant risks. Topics will include: sward lifespan, establishment and maintenance practices, forage quality indices, integration of harvest management for pastures and stored feed, and environmental implications for plant and animal biodiversity and water quality.

**Prerequisite(s):** 1 of AGR*2050, AGR*2320, AGR*2470, ENVS*2060  
**Department(s):** Department of Plant Agriculture

#### CROP*4220 Cropping Systems W (3-0) [0.50]
This course will cover the design of cropping systems for specific livestock, poultry and cash crop enterprises; integration of all factors affecting crop yields, quality and economy of production such as choice and interchangeability of crops, crop sequence, tillage, pest control, seasonal work programming, harvesting, drying and storage.

**Prerequisite(s):** (1 of CROP*3300, CROP*3310, CROP*3340), (1 of AGR*2320, ENVS*3080, ENVS*4090, ENVS*4160)  
**Department(s):** Department of Plant Agriculture

#### CROP*4240 Weed Science F (3-3) [0.50]
Weeds will be studied in relation to agricultural practices. Principles of chemical, mechanical and biological control will be outlined. Laboratories will include weed identification, weed control methods, and demonstrations of the effects of various herbicides.

**Prerequisite(s):** AGR*2470  
**Department(s):** Department of Plant Agriculture

#### CROP*4260 Crop Science Field Trip F (0-4) [0.50]
This field study course is designed to increase the student's knowledge of agricultural production, agricultural policy and agri-business. Students will tour the midwestern United States just prior to the start of the fall semester, visiting cash crop, horticultural and livestock farms, and supporting industries such as processing, manufacturing, elevators and stockyards. A student fee will be assessed to cover transportation and lodging.

**Prerequisite(s):** 12.50 credits including AGR*2470  
**Restriction(s):** A cumulative average of 65%. Instructor consent required.  
**Department(s):** Department of Plant Agriculture
Economics

Department of Economics and Finance

For courses without semester designations, please check with the department. Advance schedules are available in the department.

ECON*1050 Introductory Microeconomics S,F,W (3-0) [0.50]

An introduction to the Canadian economy: price determination, market structure and resource allocation; the behaviour of consumers and firms; market intervention by government. Some of the economic issues addressed may include agricultural price supports, rent control, the NAFTA, environmental regulation, price discrimination, pay equity, and taxation.

Offering(s): Also offered through Distance Education format.
Equate(s): ECON*1200
Department(s): Department of Economics and Finance

ECON*1100 Introductory Macroeconomics S,F,W (3-0) [0.50]

This course looks at the Canadian Economy in terms of aggregate performance and policy: analysis of the determinants of national income, employment and the price level, and the role of government monetary and fiscal policies in improving the rate of economic growth.

Offering(s): Also offered through Distance Education format.
Department(s): Department of Economics and Finance

ECON*2100 Economic Growth and Environmental Quality F (3-0) [0.50]

This course examines the implications of economic growth on the quality of the environment, employing the basic principles of economic analysis.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): ECON*1050 or FARE*1040
Department(s): Department of Economics and Finance

ECON*2310 Intermediate Microeconomics S,F,W (3-0) [0.50]

This course is an analysis of the behaviour of households and firms under alternative assumptions and market conditions.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): (ECON*1050 or FARE*1040), (1 of IPS*1500, MATH*1030, MATH*1080, MATH*1200)
Department(s): Department of Economics and Finance

ECON*2410 Intermediate Macroeconomics S,F,W (3-0) [0.50]

This course is an analysis of open as well as closed economy models of aggregate spending, output, employment, prices and interest rates under alternative assumptions about the nature of labour, product and financial markets. This includes theories of consumption, investment and money demand.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): ECON*1100, (1 of IPS*1500, MATH*1030, MATH*1080, MATH*1200)
Department(s): Department of Economics and Finance

ECON*2420 Canadian Economic History W (3-0) [0.50]

This course surveys the development of the Canadian economy from the aboriginal economy to the early fur and fish trades, agricultural settlement, industrialization, the Great Depression, growth of the public sector and fast economic growth after World War Two. Particular attention is paid to international economic relations and to regional differences within Canada.

Prerequisite(s): ECON*1050, (ECON*1100 or HIST*2450)
Department(s): Department of Economics and Finance

ECON*2560 Introduction to Finance F,W (3-0) [0.50]

This course introduces students to the economic experience of developing countries, the ways in which economists try to understand it, and the implications for policy. The basic tools of economic analysis as taught in the introductory courses are used to analyze topics that may include theories of growth, trade, education, foreign investment, exchange rates, labour markets, the role of government, environmental sustainability and strategies related to agriculture, population, industry and investment.

Prerequisite(s): ECON*1050, ECON*1100
Department(s): Department of Economics and Finance

ECON*2720 Business History W (3-0) [0.50]

This course surveys the evolution of economic activity and organization from before the industrial revolution to the present. Particular attention is given to the changing relationship between technology and business organization, the shift from proprietorship to corporations and the rise of multinational enterprise. Other topics may include the relationship between business and government, the role of the entrepreneur in the process of technical change and the evolution of work patterns and standards of living.

Prerequisite(s): ECON*1050, (ECON*1100 or any 1.50 credits in history)
Department(s): Department of Economics and Finance

ECON*2740 Economic Statistics F,W (3-1) [0.50]

This course is designed to prepare students conceptually and mathematically for ECON*2560, Theory of Finance and ECON*3740, Introduction to Econometrics. Topics include the summation operator, descriptive statistics, frequency distributions, probability and statistical independence, the binomial distribution, algebra of the expectation operator, discrete bivariate distributions, covariance, variance, a linear function of random variables, the normal and t distributions, sampling distributions, point and interval estimation, hypothesis testing and an introduction to ordinary least squares. Additional topics may be included at the instructor's discretion. Examples and assignment questions are drawn from economics and finance.

Prerequisite(s): ECON*1100, (ECON*1050, or FARE*1040), (1 of MATH*1000, MATH*1030, MATH*1080, MATH*1200)
Department(s): Department of Economics and Finance

ECON*2770 Introductory Mathematical Economics F,W (3-0) [0.50]

This course applies the elements of calculus and matrix algebra to simple microeconomic and macroeconomic problems.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): ECON*1100, (ECON*1050, or FARE*1040), (1 of MATH*1030, MATH*1080, MATH*1200)
Department(s): Department of Economics and Finance

ECON*3100 Game Theory W (4-0) [0.50]

The course introduces students to non-cooperative game theory, which is an important method of analysis for economics situations involving small numbers of interacting economic agents. The course is centered on the concept of Nash equilibrium, and applies this equilibrium concept to static and dynamic games with full as well as incomplete information. The purpose of the course is to enable students to take any economic situation, find an economic model (game) that depicts the incentives facing the participants, and analyze the game to predict the behaviour of the economic agents.

Prerequisite(s): ECON*2310, ECON*2410, (ECON*2770 or MATH*1210)
Restriction(s): ECON*3770
Department(s): Department of Economics and Finance

ECON*3300 Economics of Health and the Workplace U (3-0) [0.50]

This course will introduce students to concepts of health economics with particular relevance to workplace issues. Topics to be covered include the determinants of health, the demand for and supply of health care, the market for health care providers, health insurance, public and private, the role of health insurance in the labour market, whether not having to provide comprehensive health insurance to their workers gives Canadian firms an edge over their American competitors, workplace health risks and their effects on working conditions and salaries, workplace wellness programs and their evaluation, and the analysis of the cost effectiveness of health interventions.

Prerequisite(s): ECON*2310, (1 of ECON*2740, PSYC*2010, STAT*2040, STAT*2060, STAT*2080, STAT*2120)
Department(s): Department of Economics and Finance
ECON*3360 The Strategy of Mergers and Acquisitions F (3-0) [0.50]
As changes occur in product markets, public policy, and technology, the scope and scale required for companies to be competitive often changes as well. This course examines the role of mergers and acquisitions (M&A) in repositioning companies to remain competitive, to grow, or to exit. The course also examines how M&A can create value across a range of company types and situations. A means of assessment of M&A success or failure is provided and the course outlines the processes and skills required for successful M&A strategies, relevant to executives and supporting professional services in most industries today.
Prerequisite(s): ECON*2310, ECON*2410, ECON*2560
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Economics and Finance

ECON*3400 The Economics of Personnel Management U (3-0) [0.50]
In this course, we examine the economics of personnel management in organizations. Using mainstream microeconomic and behavioural economic theory, we will consider such issues as recruitment, promotion, financial and non-financial incentives, compensation, job performance, performance evaluation, and investment in personnel. The interplay between theoretical models and empirical evidence will be emphasized in considering different approaches to the management of personnel.
Prerequisite(s): ECON*2310 or ECON*2200
Department(s): Department of Economics and Finance

ECON*3500 Urban Economics W (3-0) [0.50]
Land is a scarce resource and is an input into production and consumption. Transportation costs are important and the structure of a city has real effects on the economic and social activities that occur in it. This course discusses how the price of a good varies by location, how the market price of a property varies over time, and how the structure of cities responds to market forces. The course discusses some public policy and managerial implications of the location dimension.
Prerequisite(s): ECON*2310
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Economics and Finance

ECON*3520 Labour Economics F (3-0) [0.50]
A study of the labour market, wage determination and the relationship between wages, employment, and prices.
Prerequisite(s): ECON*2310, (1 of ECON*2740, PSYC*2010 , STAT*2040, STAT*2050, STAT*2060, STAT*2080, STAT*2090, STAT*2100 , STAT*2120)
Department(s): Department of Economics and Finance

ECON*3530 Industrial Organization F (3-0) [0.50]
This course examines industries in which firms have the potential to exercise market power. Topics include how the competitive environment affects the behaviour of firms, measuring the extent of market power on welfare. The performance of markets under monopolies, dominant firms, cartels and oligopolies is examined and related aspects of Canadian competition policy and regulations are discussed.
Prerequisite(s): ECON*2310, (ECON*2770 or MATH*1210)
Department(s): Department of Economics and Finance

ECON*3580 Economics of Regulation U (3-0) [0.50]
A study of the economic reasons for government intervention in the marketplace. Emphasis will be placed on the role of crown corporations, regulatory agencies, regulation rules and public sector price-setting in the Canadian economy.
Prerequisite(s): ECON*2310
Department(s): Department of Economics and Finance

ECON*3610 Public Economics W (3-0) [0.50]
This course examines the interventionist role of government in the economy. It examines several sources of market failure which are used to justify government intervention. These include public goods, externalities and redistribution. The course also evaluates alternative sources of government revenue from the perspectives of both equity and efficiency. These include the personal and corporate income taxes, sales taxes and wealth taxes.
Prerequisite(s): ECON*2310
Department(s): Department of Economics and Finance

ECON*3620 International Trade U (3-0) [0.50]
An introduction to the general equilibrium analysis of international trade, international factor movements and commercial policy. Special emphasis is given to Canada's international trade relationships.
Prerequisite(s): ECON*2310
Department(s): Department of Economics and Finance

ECON*3660 Investments F,W (3-0) [0.50]
This course provides an in-depth analysis of the theory, application and evidence of financial investments with particular emphasis on the stock market. The course reviews issues relating to the valuation of financial assets, and then focuses on two main themes: building optimal domestic and international portfolios through dynamic asset allocation, and assessing the risk-return relation in the cross-section of stocks.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): ECON*2310, ECON*2560
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Economics and Finance

ECON*3710 Advanced Microeconomics F,W (4-0) [0.50]
This course provides an in-depth treatment of consumer and producer theory leading to the general equilibrium model of the economy and the study of welfare economics.
Prerequisite(s): ECON*2310, (ECON*2770 or MATH*1210). A grade average of 70% or more in these courses is recommended.
Department(s): Department of Economics and Finance

ECON*3730 The Origins of International Inequality W (3-0) [0.50]
This course surveys the world economy with a particular focus on the industrial revolution, demographic change, the rise to prominence of ‘settler colonies’, globalization and the origins of international inequality.
Prerequisite(s): 9.00 credits including ECON*1050, ECON*1100
Department(s): Department of Economics and Finance

ECON*3740 Introduction to Econometrics F,W (3-1) [0.50]
This computer-based course involves the specification and estimation of economic models and the testing of economic hypotheses using appropriate test statistics. Topics include the summation operator, expectation operator, ordinary least squares estimation, dummy variables, seasonality, multicollinearity, heteroskedasticity, autocorrelation, data sources (including uses of the Data Resource Centre). Additional topics may be included at the instructor's discretion. Heavy emphasis will be placed on applications and writing up results. Some use of spreadsheet software (e.g. QuattroPro, Excel) and statistical software (e.g. TSP, SHAZAM) will be required.
Prerequisite(s): ECON*2310, ECON*2410, ( 1 of ECON*2740, STAT*2040, STAT*2060, STAT*2080, (ECON*2770 or MATH*1210)
Department(s): Department of Economics and Finance

ECON*3760 Fundamentals of Derivatives W (3-0) [0.50]
This course provides an introduction to the theory, application and evidence of financial derivatives. It covers the theory and application of forward contract, futures, options, and swaps, and explains how these instruments can be used for purposes such as investment, hedging risk, arbitrage and speculation.
Prerequisite(s): ECON*2310, ECON*2560
Restriction(s): AGEC*4240 , FARE*4240 This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Economics and Finance

ECON*3810 Advanced Macroeconomics W (4-0) [0.50]
This course provides an advanced study of a wide range of issues in intertemporal macroeconomics. When constructing macroeconomic models in this course we will explicitly take into account microeconomic foundations. The models constructed will be used to study short-run fluctuations (or business cycles) and long term growth, and to explain cross country income disparities. Topics also include open economy macroeconomic issues.
Prerequisite(s): ECON*2410, (ECON*2740 or STAT*2040), (ECON*2770 or MATH*1210)
Department(s): Department of Economics and Finance
ECON*3960 Money, Credit and the Financial System W (3-0) [0.50]
This course explores the economics of banking, other financial institutions and credit markets.
Prerequisite(s): ECON*2410, ECON*2560
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Economics and Finance

ECON*3960 Money, Credit and the Financial System W (3-0) [0.50]
This course explores the economics of banking, other financial institutions and credit markets.
Prerequisite(s): ECON*2410, ECON*2560
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Economics and Finance

ECON*4400 Managerial Economics W (3-0) [0.50]
This course introduces students to the latest developments in the economic analysis of the inside workings of firms. The course is centered on the concept of organizational structure, which is made up of three variables: allocation of decision rights, performance evaluation and performance incentives. The course tries to explain the diversity of economic organizations, and more generally, why economic activity is sometimes carried out through firms and sometimes through markets.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): ECON*2310 Students must have completed a minimum of 12 credits.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Economics and Finance

ECON*4550 Topics in Urban Economics U (3-0) [0.50]
This course will investigate selected theoretical and applied topics in urban economics in depth. Among topics which might be treated are location theory, the theory of spatial structure, transportation economics, the economics of housing, the economics of land use regulation, urban public finance.
Prerequisite(s): ECON*3740, (ECON*3710 or ECON*3500)
Department(s): Department of Economics and Finance

ECON*4560 Advanced Topics in Finance W (3-0) [0.50]
This course will examine selected advanced topics in finance, such as optimal capital structure under asymmetric information; theoretical and empirical analysis of mergers and acquisitions; asset pricing theory; pricing derivative securities; and financial econometrics.
Prerequisite(s): ECON*2560, ECON*3710, (1 of ECON*3100, ECON*3810, ECON*4700, ECON*3740, (2 of ECON*3660, ECON*3660, ECON*3760, FARE*4240, ECON*3860, ECON*3960)
Department(s): Department of Economics and Finance

ECON*4640 Advanced Econometrics F (3-0) [0.50]
This course discusses the classical linear regression model and its extensions including generalized least squares and the theory and application of F tests. The maximum likelihood principle is introduced, as are alternative approaches to testing, e.g. LM, LR and Wald tests. Additional topics may be included at the instructor's discretion. Matrix algebra is used and proof of the Gauss-Markov theorem is included, but discussion of proofs is in general limited in order to allow substantial applications to data using statistical software such as TSP, SHAZAM, SAS, STATA.
Prerequisite(s): ECON*3740
Department(s): Department of Economics and Finance

ECON*4660 Risk Management in Finance and Insurance U (3-0) [0.50]
This course covers the advanced theory and applications of derivatives (for underlying assets such as equity and debt instruments, real assets and exchange rate instruments) and insurance in managing risk.
Prerequisite(s): ECON*3710, (1 of ECON*3650, ECON*3660, ECON*3760, ECON*3860, ECON*3960, FARE*4240)
Department(s): Department of Economics and Finance

ECON*4700 Advanced Mathematical Economics F (3-1) [0.50]
This course provides students with the necessary mathematical skills required to build rigorous models in economics, including differential and integral calculus, optimization and comparative statics analysis and advanced topics in linear algebra. It continues in the second half with application to modelling in a particular area of economics. The specific area will vary from year to year, and can include such topics as general equilibrium modelling, mathematical finance models, or economics of the environment.
Prerequisite(s): ECON*3710, ECON*3740
Department(s): Department of Economics and Finance

ECON*4710 Advanced Topics in Microeconomics F (3-0) [0.50]
An intensive study of the scope, methodology, and content of contemporary microeconomics; selected topics in partial and general equilibrium analysis.
Prerequisite(s): ECON*3710
Department(s): Department of Economics and Finance

ECON*4720 Topics in Economic History U (3-0) [0.50]
This course uses economic theory to analyse the process of historical economic change.
Prerequisite(s): 12.50 credits including (1 of ECON*2310, ECON*2720, ECON*3720 , ECON*3730)
Department(s): Department of Economics and Finance

ECON*4750 Topics in Public Economics U (3-0) [0.50]
This course examines selected topics related to the expenditure and taxation functions of government. Topics may include issues in public good theory such as the free rider problem, the problem of eliciting truthful revelation of preferences and the use of taxes as a corrective device for externalities. The course may also address optimal taxation as well as tax evasion. Throughout this course the trade-off between efficiency and equity is emphasized.
Prerequisite(s): ECON*3710
Department(s): Department of Economics and Finance

ECON*4760 Topics in Monetary Economics U (3-0) [0.50]
Selected topics in monetary economics such as theories of the demand for and supply of money, the nature and role of private banks and central banks, the transmission processes of monetary policy are examined.
Prerequisite(s): ( ECON*3600 or ECON*3810), ECON*3740, (1 of ECON*3510 , ECON*3710, ECON*3960)
Department(s): Department of Economics and Finance

ECON*4780 Topics in Industrial Organization U (3-0) [0.50]
Selected topics in the theoretical and empirical study of the organization and performance of firms and markets are covered in this course. Topics may include: strategic behaviour of firms such as actions to deter entry of rivals, pre-emptive choice of location and product quality, and research and development; the regulation of firms under uncertainty; econometric analysis of the use of market power; and modern advances in the theory of the firm.
Prerequisite(s): ECON*3530, ECON*3740
Department(s): Department of Economics and Finance

ECON*4790 Topics in Labour Market Theory U (3-0) [0.50]
Selected topics in advanced labour market theory with emphasis on empirical evidence for the Canadian labour market are covered in this course.
Prerequisite(s): ECON*3740, (ECON*3710 or ECON*3520)
Department(s): Department of Economics and Finance

ECON*4800 Competitiveness and Strategic Advantage U (3-0) [0.50]
This course is about the creation and maintenance of long-term vision for the corporation from the perspective of the general manager. It is concerned with both the determination of strategic direction and the management of the strategic process.
Prerequisite(s): 14.50 credits including ( BUS*3320 or MGMT*3320), ECON*2310, ECON*2560
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Economics and Finance
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON*4810</td>
<td>Advanced Topics in Macroeconomics W (3-0)</td>
<td>[0.50]</td>
<td>This course explores the theory of complex aggregate economic models; their assumptions, construction, and use in the analysis of macroeconomic activity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prerequisite(s): ECON<em>3740, ECON</em>3810</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Department(s): Department of Economics and Finance</td>
</tr>
<tr>
<td>ECON*4830</td>
<td>Economic Development W (3-0)</td>
<td>[0.50]</td>
<td>A study of the theories, problems and policies of economic growth with special reference to underdeveloped countries.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prerequisite(s): ECON*2310</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Department(s): Department of Economics and Finance</td>
</tr>
<tr>
<td>ECON*4840</td>
<td>Financial Econometrics W (4-0)</td>
<td>[0.50]</td>
<td>This course involves the application of statistical methods to financial market data. The statistical methods covered will include asymptotic theory, maximum likelihood estimation, instrumental variables, simultaneous equation models and selected topics such as models for limited dependent variables, models for panel data, ARCH models, units roots and error correction models.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prerequisite(s): ECON*3740</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Department(s): Department of Economics and Finance</td>
</tr>
<tr>
<td>ECON*4860</td>
<td>Seminar in Current Economic Problems U (3-0)</td>
<td>[0.50]</td>
<td>In a seminar setting, selected contemporary economic problems are examined.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prerequisite(s): (ECON<em>3600 or ECON</em>3810), ECON<em>3710, ECON</em>3740</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Department(s): Department of Economics and Finance</td>
</tr>
<tr>
<td>ECON*4880</td>
<td>Topics in International Economics U (3-0)</td>
<td>[0.50]</td>
<td>Selected topics involving the advanced analysis of the causes and effects of trade and financial flows and international factor movements are covered in this course.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prerequisite(s): (1 of or ECON<em>3610, ECON</em>3810, ECON<em>3860), (ECON</em>3710 or ECON*3620)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Department(s): Department of Economics and Finance</td>
</tr>
<tr>
<td>ECON*4890</td>
<td>History of Economic Thought U (3-0)</td>
<td>[0.50]</td>
<td>A study of the development of economic theory, the tools of economic analysis, and the evaluation of economics as a science, together with an analysis of the circumstances affecting this development.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prerequisite(s): ECON<em>2310, ECON</em>2410</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Department(s): Department of Economics and Finance</td>
</tr>
<tr>
<td>ECON*4900</td>
<td>Special Study in Economics S,F,W (3-0)</td>
<td>[0.50]</td>
<td>The special study option is designed to provide senior undergraduate students with an opportunity to pursue an independent course of study. The subject matter will be related to regular 4000 level courses. Students will be required to submit a major paper/report on the subject matter studied. Formal agreement between the student and instructor of the course is required as well as the approval of the department chair or designate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prerequisite(s): (ECON<em>3600 or ECON</em>3810), ECON<em>3710, ECON</em>3740</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Department(s): Department of Economics and Finance</td>
</tr>
<tr>
<td>ECON*4910</td>
<td>Special Study in Economics S,F,W (3-0)</td>
<td>[0.50]</td>
<td>Same description as for ECON*4900.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Department(s): Department of Economics and Finance</td>
</tr>
<tr>
<td>ECON*4930</td>
<td>Environmental Economics F (3-0)</td>
<td>[0.50]</td>
<td>This course is an advanced treatment of the interrelationship between economic activities and the state of the natural environment from an economics perspective.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prerequisite(s): 14.50 credits including ECON<em>2310, ECON</em>2770</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Department(s): Department of Economics and Finance</td>
</tr>
</tbody>
</table>
Environmental Design and Rural Development

School of Environmental Design and Rural Development

EDRD*1400 Introduction to Design W (3-0) [0.50]
This course is designed to increase visual awareness and recognition of natural and planned design elements in the environment. Students will investigate the roles of designers and seek to develop an understanding of design as an applied process that responds to human needs.
Department(s): School of Environmental Design and Rural Development

EDRD*2020 Interpersonal Communication F (3-0) [0.50]
This course introduces to dyadic and small-group communication. The focus is on communication style and effectiveness with attention to verbal and nonverbal communication, listening, behaviour, and conflict.
Offering(s): Offered through Distance Education format only.
Department(s): School of Environmental Design and Rural Development

EDRD*2250 Planning Theory and Practice F (3-0) [0.50]
The course links the body of planning theory to the Canadian experience of local planning practice. It provides an introduction to the issues of planning in the public realm and its role in implementation of the development of municipalities through both growth as well as decline. This is achieved by examining planning theory and reflecting on the context and process of planning in practice in Canada. The student in the course will come to understand both the role of theory in guiding practice as well as the role of practice in evolution of theory. This understanding is critical to the role of the professional planner in facilitating local development and managing change in the public interest.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 2.00 credits
Department(s): School of Environmental Design and Rural Development

EDRD*2650 Introduction to Planning and Environmental Law F,W (3-0) [0.50]
The goal of the course is to introduce the students to the principles and processes that govern the management of land use and the protection of the environment. This will be done through an examination of the key legislation and regulations applied to land use and the environment.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 5.00 credits
Department(s): School of Environmental Design and Rural Development

EDRD*3050 Agricultural Communication I F (3-0) [0.50]
Practical and effective ways of communicating information to a broad audience via the media, focusing mainly on print media (newspapers and magazines) and agricultural media. Strong emphasis on writing and preparing ready-to-use material and strategies for getting it published. (Students will develop an understanding of the news/communications business and find where they can fit into it or use it to their advantage to get a job. Contact with professionals will be a major part of the course).
Prerequisite(s): 10.00 credits
Equates(s): REXT*3050, REXT*4050
Department(s): School of Environmental Design and Rural Development

EDRD*3120 Educational Communication F (3-0) [0.50]
This course addresses the communication concepts and practices within the formal and non-formal educational contexts. Communication is central to teaching and learning because communication mediates a conscious effort either on the part of the learners to learn, or on the part of the teachers to provide and transfer knowledge, attitudes and skills.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 5.00 credits
Restriction(s): REXT*3100
Department(s): School of Environmental Design and Rural Development

EDRD*3140 Organizational Communication W (3-0) [0.50]
This course explores the application of communication process theory to organizations with special emphasis on internal organizational processes experienced at individual, group and organizational levels. Students examine communication in different organizational contexts including civil society, government, business and transnational corporations.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 5.00 credits
Restriction(s): REXT*3040
Department(s): School of Environmental Design and Rural Development

EDRD*3160 International Communication W (3-0) [0.50]
This course examines the role of communication in global development. Emphasis is on the application of interpersonal, intercultural communications and the mass media in the development process.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 10.00 credits
Restriction(s): REXT*3060
Department(s): School of Environmental Design and Rural Development

EDRD*3400 Sustainable Communities W (2-1) [0.50]
The structure, function and trends affecting agri-food community settings including historical, ecological and social factors, institutions, agencies and change processes are discussed. The agricultural role of the Provincial Government and the contemporary impact of the agro-industrial complex on Ontario communities will be considered mainly from a comparative perspective. Related topics will include physical infrastructure, political conflicts, labour markets, settlement patterns, housing, gender relations, landscape management, quality of life, sustainability and the promotion of community leadership.
Prerequisite(s): 10.00 credits
Department(s): School of Environmental Design and Rural Development

EDRD*3450 Watershed Planning Practice F,W (3-0) [0.50]
An introduction to the principles and practice of watershed-based planning, with an emphasis on Ontario, but with reference to other parts of Canada, the U.S. and international contexts. History of water resource use and abuse, basic concepts of hydrology, water resource management, ecosystem approaches, and planning theory are also included.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 10.00 credits
Equates(s): UNIV*3400
Department(s): School of Environmental Design and Rural Development

EDRD*3500 Recreation and Tourism Planning F,W (3-0) [0.50]
Application of planning theory to recreation and tourism in the private and public sectors, approaches to implementing plans, and strategies for involving stakeholders in the planning process. Focus will also be on the impact of various approaches to planning recreation and tourism.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 10.00 credits
Department(s): School of Environmental Design and Rural Development

EDRD*4010 Tourism Planning in the Less Developed World W (3-0) [0.50]
This course will provide a discussion and investigation of tourism from an interdisciplinary point of view. The subject of tourism development cuts across many disciplines and is fundamental to a variety of scholars and practitioners working in tourism and development generally. While a variety of important theories and planning practices from a variety of disciplines have been selected for study, planning and community development theory will provide the overarching perspective. The features of planning theories and models stress analysis and intervention into human and environmental systems. This perspective begins with the view that tourism is a complicated human construct and as such needs to be structured and guided in order to maximize the benefits to all stakeholders in the system.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 5 credits
Department(s): School of Environmental Design and Rural Development

EDRD*4020 Rural Extension in Change and Development F (3-0) [0.50]
The planning and management of development programs with emphasis on the role of non-formal education and counselling in influencing behavioral change and adoption of innovation. Case studies include cross cultural and international considerations.
Prerequisite(s): 10.00 credits
Equates(s): REXT*4020
Department(s): School of Environmental Design and Rural Development

EDRD*4600 Agricultural Communication II W (3-0) [0.50]
Application of practical and effective writing and communication techniques, mainly through the production of print publications and the further development and application of journalistic writing and editing skills. Special emphasis on issues important to the agri-food industry.
Prerequisite(s): 1 of EDRD*3050, REXT*3050, equivalent
Equates(s): REXT*4060
Department(s): School of Environmental Design and Rural Development

Department(s):

Restriction(s):

Prerequisite(s):

Offering(s):

Corporations.
Organizational contexts including civil society, government, business and transnational corporations.
Students examine communication in different organizational contexts including civil society, government, business and transnational corporations.

Department(s):

Restriction(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):

Prerequisite(s):

Offering(s):

Equates(s):

Department(s):
EDRD*4120 Leadership Development in Small Organizations F (3-0) [0.50]

The main theories of leadership will be discussed with exploration of the current literature, practice leadership skills and perform relevant activities in an on-line environment. Emphasis will be placed on the communication challenges facing leaders in small organizations and the importance of developing a culture of shared leadership.

Offering(s): Offered through Distance Education format only.
Prerequisite(s): 10.00 credits
Restriction(s): REXT*4100.
Department(s): School of Environmental Design and Rural Development
Engineering

School of Engineering

Students who are not registered in the B.Eng. degree program may take no more than 3.00 Engineering (ENGG*XXXX) credits.

Some ENGG* courses have priority access restrictions. Enrolment in these courses is restricted to students registered in BENG Degree program. All other students will require a waiver form to be signed by the BENG Program Counsellor.

ENGG*1070 Occupational Health and Safety F (2-0) [0.25]
This course presents the legal implications of occupational health and safety as expressed in the Environmental and Occupational Health and Safety Act, and exposes students to methodologies designed to ensure compliance with the Act. The course stresses safety initiatives and deals with specific safety issues such as noise levels, biosafety, hazardous waste management, safety in the workplace, radiation safety and industrial safety.

Restriction(s): Registration in the BENG Program

Department(s): School of Engineering

ENGG*1100 Engineering and Design I F (2-4) [0.75]
This course provides an introduction to engineering and design. An overview of design processes is covered and students experience a defined, open-ended design project. Physical design development is emphasized, supplemented by elements of analysis. Engineering communications emphasize the visual form and span engineering drawings across a spectrum of engineering disciplines (2D and 3D, realistic and symbolic). Sketching and computer aided tools are both developed. Written communications (individual and team) focus on design. The practice of professional engineering, ethical principles and the engineer’s role and obligations in society are all introduced. The coursework is team based to reflect the practice of engineering and the character of the School of Engineering.

Restriction(s): Registration in the BENG Program

Department(s): School of Engineering

ENGG*1210 Engineering Mechanics I W (3-2) [0.50]
This course presents the fundamental principles of Newtonian mechanics; distributed loading; free body diagrams; rigid body equilibrium; structural analysis; internal loading of structural members; friction; dynamics of particles; linear and angular momentum of rigid bodies; conservation of energy; principles of impulse and momentum, and plane motion of rigid bodies.

Prerequisite(s): MATH*1200, PHYS*1130

Department(s): School of Engineering

ENGG*1500 Engineering Analysis F,W (3-1) [0.50]
This course deals with engineering applications of matrix algebra, vector spaces and computer techniques to solve linear systems. Topics include theory and applications of linear transformations, eigenvalues and eigenvectors, diagonalization, complex-variable algebra, and multi-variable functions.

Restriction(s): MATH*1160, MATH*2150, MATH*2160

Department(s): School of Engineering

ENGG*2100 Engineering and Design II F,W (2-4) [0.75]
This course is a progression in engineering design skills with particular emphasis on computer usage in design, oral communication of solutions and team skills. Computer usage in design will include advanced CAD/CAM/CAE tools; and database management software. An introduction to safety in engineering practice and design, the practice of professional engineering, ethical principles and the engineer’s role and obligations in society are all introduced. The coursework is team based to reflect the practice of engineering and the character of the School of Engineering.

Prerequisite(s): Completion of 4.0 credits including ENGG*1100

Department(s): School of Engineering

ENGG*2120 Material Science F,W (3-2) [0.50]
Study of the mechanical, electrical, magnetic, optical and thermal properties of solids. Atomic order and disorder in solids, single-phase metals, and multiphase materials (their equilibria and micro-structure) are examined as a basis for understanding the causes of material properties. Interwoven throughout the course is an introduction to materials selection and design considerations.

Prerequisite(s): CHEM*1040, PHYS*1130

Department(s): School of Engineering

ENGG*2130 Introduction to Environmental Engineering F (1.5-3) [0.50]
This course introduces the field of environmental engineering, including minimizing the negative effects of human activities, responsible resource use and recovery, and remediation of soil, water and air pollution. Students will explore relevant ethical issues and as well as regulations and policies in diverse areas of environmental engineering. Skills development integrated throughout the course elements will emphasize writing, teamwork, the collaborative nature of the field, engineering tools used in environmental engineering, and data management and analysis.

Offering(s): First offering - Fall 2020

Prerequisite(s): ENGG*1210, ENGG*1500, 0.50 credits in calculus

Restriction(s): Registration in BENG.ENVE or BENG.ENVE:C.

Department(s): School of Engineering

ENGG*2160 Engineering Mechanics II F (3-1) [0.50]
Fundamental principles of the mechanics of deformable materials; stress and strain; Mohr's circle for transformation of stress and strain; deflection under load; design of beams, shafts, columns and pressure vessels; failure theory and design.

Prerequisite(s): ENGG*1210, ENGG*1500, 0.50 credits in calculus

Department(s): School of Engineering

ENGG*2180 Introduction to Manufacturing Processes W (3-2) [0.50]
This course is designed to provide students with an overview of a wide variety of manufacturing processes involved in industrial activities. While most of the manufacturing processes are to be introduced during the course, more emphasis will be given on those processes which are more common in industry, namely material removal processes, casting, and forming. In addition to introducing the various manufacturing process, mathematical models and several empirical data and equations describing the various manufacturing processes will be covered in order to provide the students with a better understanding of the relations between the parameters involved.

Prerequisite(s): ENGG*2160

Co-requisite(s): ENGG*2120

Department(s): School of Engineering

ENGG*2230 Fluid Mechanics F (3-2) [0.50]
Analysis of steady ideal and viscous fluid flow systems using the Continuity, Bernoulli and Momentum equations. Boundary layer theory is treated in terms of viscous and pressure drag, lift and its importance in heat and mass transfer. Dimensional analysis and dynamic similitude are studied to provide an understanding of flow systems analysis and modeling. Introduction to pipe flow and open channel flow.

Prerequisite(s): ENGG*1210, MATH*1210

Department(s): School of Engineering

ENGG*2340 Kinematics and Dynamics W (3-2) [0.50]
The course will cover kinematic and dynamic analysis including graphical and analytical methods for kinematic analysis of space, mechanisms and elementary body motion in space, static and dynamic force analyses of mechanisms, gyroscopic forces, dynamics of reciprocating and rotating machinery, cam and gear mechanisms and specifications.

Prerequisite(s): ENGG*1210

Department(s): School of Engineering

ENGG*2400 Engineering Systems Analysis F (3-1) [0.50]
Analytical description and modeling of engineering systems such as mechanical, electrical, thermal, hydraulic, biological and environmental systems. Applications of multivariable calculus, linear algebra and differential equations to simulate and analyse such systems.

Prerequisite(s): ENGG*1210, ENGG*1500, MATH*1210, MATH*1210, PHYS*1130

Department(s): School of Engineering

ENGG*2410 Digital Systems Design Using Descriptive Languages F (3-3) [0.50]
Review of Boolean algebra and truth tables, Karnaugh maps. Design, synthesis and realization of combinational circuits. Design, synthesis and realization of sequential circuits. VHDL: structural modeling, data flow modeling, synchronous & asynchronous behavior descriptions, algorithmic modeling. Designing with PLDs. Digital design with SM charts. Designing with PGAs and complex programmable logical devices. Hardware testing and design for testability. Hierarchy in large designs. The course will primarily be concerned with the design of multi-input, multi-output digital controllers which provide the central control signals that orchestrate the collection of hardware devices (from SSI to VLSI) found in a digital system. An introduction to FPGA-based, as well as microprocessor-based digital systems design will be given. Design examples will include systems such as UART, microcontroller CPU, ALU and data acquisition system.

Prerequisite(s): (CIS*1650 or CIS*1500), PHYS*1130

Department(s): School of Engineering
ENGG*2450 Electric Circuits W (3-2) [0.50]
This course explores the fundamentals of electric circuit analysis. Course topics include: lumped circuit abstraction; circuit elements and their characteristics; nodal and mesh analysis; linearity and superposition principles; fundamental circuit theorems; Thévenin and Norton equivalent circuits; introduction to the ideal operational amplifier and operational-amplifier circuits; dynamics of first and second order circuits including switched circuits; coupled inductors and transformers; alternate-current circuits and sinusoidal steady-state analysis with phasor methods.
Prerequisite(s): ENGG*2400, PHYS*1010
Department(s): School of Engineering

ENGG*2550 Water Management W (3-0) [0.50]
The influence of fundamental engineering and hydrologic principles on the choices available for management of water on a watershed basis is demonstrated for representative techniques used in management for water supply, irrigation, flood control, drainage and water pollution control. Selected problems are studies to reveal the technical, environmental, legal, jurisdiction, political, economic and social aspects of water management decisions.
Prerequisite(s): 5.00 credits including CHEM*1040
Department(s): School of Engineering

ENGG*2560 Environmental Engineering Systems W (3-2) [0.50]
Analysis techniques for natural and engineered systems including chemical, physical and biological processes. Mass balance analysis for steady state and unsteady state situations. Analysis under both equilibrium and non-equilibrium conditions. Reactor types including batch, plug-flow, CSTR. Noise pollution, control and prevention.
Prerequisite(s): CHEM*1050, MATH*2270
Department(s): School of Engineering

ENGG*2660 Biological Engineering Systems I W (3-1) [0.50]
This course deals with the mathematical description and identification of biological systems through: mass and energy balances; reactions in biological systems; and applications in biomedicine, food and bioprocessing.
Prerequisite(s): ENGG*2400, MATH*2270, (1 of BIOL*1070, BIOL*1080, BIOL*1090)
Department(s): School of Engineering

ENGG*3050 Embedded Reconfigurable Computing Systems F (3-2) [0.50]
This course introduces the students to the analysis, synthesis and design of embedded systems and the implementation of embedded systems using Field Programmable Gate Arrays. Topics include: review of digital design concepts; Programmable Logic Devices; Field Programmable Logic Devices; physical design automation (partitioning, placement and routing); Hardware Descriptive Languages: VHDL; Verilog; High Level Languages; Systems-C; Handle-C; Fixed Point and Floating Point Arithmetic; Hardware Accelerators; Reconfigurable Instruction Set Computers; Hardware Software Co-design techniques; Application of Field Programmable Logic in Embedded Systems.
Prerequisite(s): ENGG*2410, ENGG*3380
Department(s): School of Engineering

ENGG*3070 Integrated Manufacturing Systems F (3-2) [0.50]
Common production machines and manufacturing systems are dealt with, particularly automated systems, robotics, computer control and integration techniques, materials handling, inspection processes and process control. The course addresses societal and environmental issues related to manufacturing.
Prerequisite(s): ENGG*2120
Department(s): School of Engineering

ENGG*3080 Energy Resources & Technologies F (3-2) [0.50]
The challenges of changing the global energy system to reduce dependence on finite fossil energy sources, and transition to environmentally sustainable energy sources, are examined. The reserves, consumption, applications and environmental and human impacts of oil, coal and natural gas usage are examined. The fundamental principles, applications and status of a range of renewable energy sources and technologies will be covered to provide a solid background for further study of sustainable energy.
Co-requisite(s): ENGG*3260
Restriction(s): ENGG*2030
Department(s): School of Engineering

ENGG*3100 Engineering and Design III W (3-2) [0.75]
This course combines the knowledge gained in the advanced engineering and basic science courses with the design skills taught in ENGG*1100 and ENGG*2100 in solving open-ended problems. These problems are related to the student's major. Additional design tools are presented, including model simulation, sensitivity analysis, linear programming, knowledge-based systems and computer programming. Complementing these tools are discussions on writing and public speaking techniques, codes, safety issues, environmental assessment and professional management. These topics are taught with the consideration of available resources and cost.
Prerequisite(s): Registration in the BENG program and completion of 6.00 credits of ENGG courses including ENGG*2100
Restriction(s): Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses. Restriction waiver requests are handled by the Director, School of Engineering, or designate.
Department(s): School of Engineering

ENGG*3120 Computer Aided Design and Manufacturing W (3-2) [0.75]
The course presents the elements of solid modelling, creation of parts of increasing complexity and the assembly of parts to form a final design, along with mechanism simulation. The operation and programming of CNC machines is covered.
Prerequisite(s): ENGG*2100, ENGG*3280
Department(s): School of Engineering

ENGG*3130 Modelling Complex Systems W (3-2) [0.50]
This course explores the application of systems thinking to complex global issues. Key topics will include: systems theory, complex adaptive systems, systems tools, and systems approaches. The course will emphasize the role of computational modelling and simulation as a central tool for applying systems thinking to real-world settings.
Prerequisite(s): CIS*1500, ENGG*2400, STAT*2120
Department(s): School of Engineering

ENGG*3140 Mechanical Vibration F (3-3) [0.50]
This course will provide students with an introduction to the fundamental concepts of vibration engineering using both single and multiple degrees of freedom concepts. The free and forced response of these systems will be covered. Emphasis will be placed on the design of vibration suppression and isolation of mechanical systems. Concepts of natural frequencies and mode shapes and their significance in the solution of multiple degrees of freedom problems will be covered. Vibration of rotating machinery, balancing, condition monitoring, and predictive vs. preventative maintenance philosophies will be introduced.
Prerequisite(s): ENGG*2340, MATH*2270
Department(s): School of Engineering

ENGG*3150 Engineering Biomechanics F (3-2) [0.50]
The following topics related to biomechanics are covered in this course: kinematic and kinetic analysis techniques; electromyography; current techniques in laboratory instrumentation and biomedical applications.
Prerequisite(s): 4.00 ENGG credits, including ENGG*1210
Department(s): School of Engineering

ENGG*3160 Biological Engineering Systems II F (3-2) [0.50]
Mass transfer in biological systems: concepts; gas-liquid mass transfer; membrane transport processes; and heterogeneous reactions. Applications may include fermenter aeration, tissue perfusion, mass transfer limitations in biofilms, microbial flocs and solid tumours, protein recovery and drug delivery.
Prerequisite(s): ENGG*2230, ENGG*2660
Department(s): School of Engineering

ENGG*3170 Biomaterials W (3-2) [0.50]
Physical properties of natural and synthetic (e.g. stainless steel, polymers) materials used in biological engineering applications are presented in this course. Topics will include microstructure and mechanical properties of typical biomaterials, quantification of advanced material properties and behaviours, fabrication, compatibility, biodegradation and mechanical failure. Typical applications will include processing of biomaterials as well as equipment and implant design.
Prerequisite(s): ENGG*2120
Department(s): School of Engineering
ENGG*3180 Air Quality F (3-2) [0.50]


Prerequisite(s): ENGG*2230, (ENGG*2560 or ENGG*2660)
Co-requisite(s): ENGG*3260
Department(s): School of Engineering

ENGG*3190 Logic Synthesis W (3-2) [0.50]

This course presents automatic logic synthesis techniques for computer-aided design (CAD) of very large scale integrated (VLSI) circuits and systems. Topics covered are: two-level Boolean network optimization, multi-level Boolean network optimization, technology mapping for library-based designs and field-programmable gate-array (FPGA) designs, and state-assignment and re-timing for sequential circuits. The course will also cover various representations of Boolean functions such as binary decision diagrams (BDDs) and discuss their applications to logic synthesis.

Prerequisite(s): ENGG*2410
Department(s): School of Engineering

ENGG*3210 Communication Systems W (3-2) [0.50]

This course is an introduction to the fundamentals of data communication and computer networking. The data communication basics will cover signal transmission and signal encoding techniques such as: multiplexing techniques, signaling, encoding and decoding, error detection and recovery, switching window techniques. Computer networking basics will cover: communication network components and topologies, multiple access design issues and performance analysis, switching, routing, services and applications, and security. The course will also cover the mathematical tools (Fourier transform, etc.) used in signal analysis.

Prerequisite(s): MATH*2130, STAT*2120
Department(s): School of Engineering

ENGG*3220 Groundwater Engineering W (3-2) [0.50]

This is an introductory course in groundwater engineering, an important area of practice for water resource and environmental engineers. The main goals of the course are: (1) to teach engineering students fundamental concepts in applied quantitative hydrogeology; and (2) to provide understanding of practical engineering tools and approaches for analysis including field and lab work.

Prerequisite(s): ENGG*2230
Department(s): School of Engineering

ENGG*3240 Engineering Economics F (3-0) [0.50]

This course covers the principles of project evaluation; analysis of capital and operating costs of engineering alternatives, benefit-cost ratio; break-even studies, evaluations recognizing risk, replacement and retirement of assets; tax considerations, influence of sources of funds.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): MATH*1210
Restriction(s): Registration in the Engineering program.
Department(s): School of Engineering

ENGG*3250 Energy Management & Utilization W (3-2) [0.50]

This course introduces notions of energy conservation and efficiency, an integrated approach to energy auditing and examples of typical applications (examples include: steam generation and distribution, process or comfort cooling, pumping and compressed air, human needs for modern living, energy consumption in buildings and industry). It also covers pinch technology and its application for energy recovery in industry, and methods to achieve low energy buildings.

Co-requisite(s): ENGG*3430
Restriction(s): ENGG*3030
Department(s): School of Engineering

ENGG*3260 Thermodynamics F (3-2) [0.50]

This course covers macroscopic thermodynamics and its applications to engineering practice. Topics include properties of pure substances and equilibrium, the First Law of thermodynamics (energy transfer and energy balance in closed and flow systems), the Second Law of thermodynamics and its applications (entropy analysis of closed and flow systems, quantification of irreversibilities and inefficiencies, quality of energy, etc.), thermodynamic cycles and exergy.

Prerequisite(s): CHEM*1040, ENGG*2230, ENGG*2400, MATH*2270
Department(s): School of Engineering

ENGG*3270 Electromagnetics in Biomedical Engineering F (3-2) [0.50]

This course explores the fundamentals of electromagnetics in biomedical engineering. Course topics include the following: vectors and spatial geometry, partial derivatives, multiple integrals, vector calculus, electrostatics, steady-state electric circuits, magnetostatics, Ampere's Law, Faraday's Law, and propagation of electromagnetic waves.

Applications within biomedical engineering will be covered, e.g., computerized tomography, electromagnetic radiation safety and physiological effects, magnetic sensitivity of brain and heart tissue, tissue electrical resistances, ophthalmology, and light-tissue interaction.

Prerequisite(s): ENGG*2450
Department(s): School of Engineering

ENGG*3280 Machine Design F (3-3) [0.75]

This course provides the concepts, procedures, and analysis techniques necessary to design various mechanical elements commonly found in machines. Failure analysis such as yield criteria and fatigue are covered. Component design includes screws, fasteners, shafts, bearings and lubrication, and gears. The emphasis is on the use of readily available materials, standard component, and appropriate design approaches to achieve safe and efficient system design.

Prerequisite(s): ENGG*2120, ENGG*2160, ENGG*2230, ENGG*2340, ENGG*2450
Department(s): School of Engineering

ENGG*3340 Geographic Information Systems in Environmental Engineering F (3-0) [0.50]

Geographical information system structure and functions. Data structuring and application program development. Data input, display and analysis. Applications in environmental engineering and natural resource development/management. Students will be able to use a GIS software package to build geographical information systems.

Prerequisite(s): (CIS*1500 or CIS*1600), (1 of MATH*1000, MATH*1080, MATH*1200)
Department(s): School of Engineering

ENGG*3370 Applied Fluids and Thermodynamics W (3-2) [0.50]

This course builds on the fundamentals of fluid dynamics and thermodynamics introduced in previous courses by looking at relevant applications. Topics to be covered include: heating, ventilation and air conditioning (HVAC); heat engine systems such as the Carnot cycle for refrigeration and heat pumps and the Rankine cycle for vapour power systems; compressible flow, turbomachinery such as pumps, turbines, and propellers; and an introduction to combustion.

Prerequisite(s): ENGG*2230, ENGG*2360
Co-requisite(s): ENGG*3430
Department(s): School of Engineering

ENGG*3380 Computer Organization and Design W (3-2) [0.50]

This course contains a detailed examination of modern computer organization and techniques for microprocessor architecture design. Topics include - CPU design; instruction set design, addressing modes, operands; data flow design; internal bus structure, data flow signals, registers; control sequence design: hardwired control, decoding, microprogramming; architecture classes: CISC, RISC, and DSP. Memory organization; performance. Students must complete a term project that includes design, implementation, and demonstration of a CPU using a hardware descriptive language like VHDL.

Prerequisite(s): ENGG*2410
Department(s): School of Engineering

ENGG*3390 Signal Processing F (3-2) [0.50]

This course will establish the fundamental analysis and design techniques for signal processing systems. Topics covered include: definition and properties of linear time-invariant systems; impulse response and convolution; continuous-time Laplace transform, Fourier series, Fourier transform; discrete-time Fourier transform, discrete-time Fourier series, fast Fourier transform, Z transform; complex frequency response; filter analysis and design for both continuous and discrete time systems. Students will be able to design continuous-time filters and both design and implement discrete-time digital filters using computer-based tools.

Prerequisite(s): ENGG*2400
Department(s): School of Engineering

ENGG*3410 Systems and Control Theory W (3-2) [0.50]

This course explores the fundamentals of electromagnetics in biomedical engineering. Course topics include the following: vectors and spatial geometry, partial derivatives, multiple integrals, vector calculus, electrostatics, steady-state electric circuits, magnetostatics, Ampere's Law, Faraday's Law, and propagation of electromagnetic waves.

Applications within biomedical engineering will be covered, e.g., computerized tomography, electromagnetic radiation safety and physiological effects, magnetic sensitivity of brain and heart tissue, tissue electrical resistances, ophthalmology, and light-tissue interaction.

Prerequisite(s): ENGG*2450
Department(s): School of Engineering

ENGG*3430 System and Control Theory W (3-2) [0.50]

This course explores the fundamentals of electromagnetics in biomedical engineering. Course topics include the following: vectors and spatial geometry, partial derivatives, multiple integrals, vector calculus, electrostatics, steady-state electric circuits, magnetostatics, Ampere's Law, Faraday's Law, and propagation of electromagnetic waves.

Applications within biomedical engineering will be covered, e.g., computerized tomography, electromagnetic radiation safety and physiological effects, magnetic sensitivity of brain and heart tissue, tissue electrical resistances, ophthalmology, and light-tissue interaction.

Prerequisite(s): ENGG*2450
Department(s): School of Engineering

ENGG*3440 Computer Organization and Design W (3-2) [0.50]

This course contains a detailed examination of modern computer organization and techniques for microprocessor architecture design. Topics include - CPU design; instruction set design, addressing modes, operands; data flow design; internal bus structure, data flow signals, registers; control sequence design: hardwired control, decoding, microprogramming; architecture classes: CISC, RISC, and DSP. Memory organization; performance. Students must complete a term project that includes design, implementation, and demonstration of a CPU using a hardware descriptive language like VHDL.

Prerequisite(s): ENGG*2410
Department(s): School of Engineering

ENGG*3440 Computer Organization and Design W (3-2) [0.50]

This course contains a detailed examination of modern computer organization and techniques for microprocessor architecture design. Topics include - CPU design; instruction set design, addressing modes, operands; data flow design; internal bus structure, data flow signals, registers; control sequence design: hardwired control, decoding, microprogramming; architecture classes: CISC, RISC, and DSP. Memory organization; performance. Students must complete a term project that includes design, implementation, and demonstration of a CPU using a hardware descriptive language like VHDL.

Prerequisite(s): ENGG*2410
Department(s): School of Engineering
ENGG*3430 Heat and Mass Transfer W (3-1) [0.50]
Analysis of steady and transient thermal systems involving heat transfer by conduction, convection and radiation and of mass transfer by molecular diffusion and convection. Other topics include the thermal analysis of heat exchangers and heat transfer systems involving a change of state.
Prerequisite(s): ENGG*2230, ENGG*3260, MATH*2270
Department(s): School of Engineering

ENGG*3450 Electronic Devices F (3-2) [0.50]
This course explores the theory and principles of modern electronic devices and their applications in circuits. Course topics include: intrinsic and doped semiconductors; drift and diffusion currents; metal-semiconductor contacts and MOS capacitors; pn junctions and breakdown phenomena; solid-state diodes; bipolar and MOS field-effect transistors; current-voltage characteristics and biasing; small-signal models and operation; circuit integration; analysis and design of application circuits, operational transconductance amplifiers, and logic gates.
Prerequisite(s): ENGG*2450
Department(s): School of Engineering

ENGG*3470 Mass Transfer Operations W (3-2) [0.50]
Prerequisite(s): ENGG*2230, ENGG*3260, MATH*2270
Co-requisite(s): ENGG*3430
Department(s): School of Engineering

ENGG*3490 Introduction to Mechatronic Systems Design W (3-2) [0.75]
This course covers the design of mechatronic systems, which are synergistic, combinations of components and controls drawn from mechanical engineering, electronics, and computer engineering. The course covers the following areas: (1) modeling of mechatronic systems (mechanical, electrical/electronic systems) and understanding their behaviour, (2) sensing and measurement including a variety of mechatronics sensors (fundamentals and applications), (3) actuators specific to mechatronics including motors and drivers (fundamentals and applications), (4) basic microcontroller programming as well as sensor/actuator integrations, and (5) control and its applications in mechatronics.
Prerequisite(s): ENGG*2340, ENGG*2450
Co-requisite(s): ENGG*3410
Department(s): School of Engineering

ENGG*3510 Electromechanical Devices F (3-3) [0.50]
The aim of this course is to develop an understanding of the electrical and electromechanical principles and their applications as devices used in engineering. The course covers magnetic fields of currents and coils; magnetic materials; magnetic circuits; induced, electric and magnetic fields (EMF); inductance, transformers magnetic forces, permanent magnets and electromagnets. The course examines the principles of variable-reluctance devices, stepper motors, moving-coil devices, direct current (DC) and alternating current (AC) motors. Semiconductors materials and devices, diodes, and transistors; principles of modern electronic devices and their applications in circuits; as well as operational amplifiers and digital logics are also studied.
Prerequisite(s): ENGG*2450, PHYS*1010
Department(s): School of Engineering

ENGG*3570 MEMS and Microfabrication F (3-2) [0.50]
This course presents a broad survey of micro-electro-mechanical systems (MEMS) and microfabrication technologies. It covers silicon and non-silicon microfabrication techniques for micromsors, microactuators, and nanotechnology. It introduces CAD tools and mechanical and electrical issues in designing devices such as micromotors, grippers, accelerometers, and pressure sensors. It discusses limitations and challenges in design and fabrication of MEMS and enables the application of general micromachining principles to developing novel devices.
Prerequisite(s): ENGG*2450, PHYS*1010
Department(s): School of Engineering

ENGG*3590 Water Quality F (3-3) [0.50]
This course builds on the student's experience in chemistry, biology, physics and fluid mechanics, and provides an engineering perspective on: (i) standard methods of water quality analysis for physical, chemical and biological characteristics of water; (ii) significance and interpretation of analytical results, (iii) modeling of water quality in natural systems and (iv) introduction to engineered water and wastewater treatment systems.
Prerequisite(s): ENGG*2230, ENGG*2560, (1 of BIOL*1040, BIOL*1090, MIRC*1020, MIRC*2420), STAT*2120
Department(s): School of Engineering

ENGG*3640 Microcomputer Interfacing F (3-3) [0.50]
This course focuses on the subject of interfacing microcomputers to external equipment. Topics include peripheral devices, hardware interfaces, device driver software and real time programming. Advanced programming: debugging of embedded systems, data structures and subroutine calls, high-level system programming. Interrupts and resets, real time events, signal generation and timing measurements. Synchronous and asynchronous serial communication. Parallel I/O ports and synchronization techniques. I/O interfacing, microcomputer busses, memory interfacing and direct memory access (DMA). Data acquisition topics include signal conditioning analog to digital conversion and digital signal processing.
Prerequisite(s): ENGG*2410, ENGG*2450
Restriction(s): ENGG*4640
Department(s): School of Engineering

ENGG*3650 Hydrology F (3-1) [0.50]
Quantitative study of natural water circulation systems with emphasis on basic physical principles and interrelationships among major processes; characteristics of mass and energy; inputs to and output from watersheds; factors governing precipitation occurrence, evaporation rates, soil-water storage changes, groundwater recharge and discharge, run-off generation; methods of streamflow analysis; mathematical modeling.
Prerequisite(s): (ENGG*2230 or MET*2030), (MATH*1210 or MATH*2080), (STAT*2120 or STAT*2040), and competency in computing.
Department(s): School of Engineering

ENGG*3670 Soil Mechanics F (3-2) [0.50]
Relations of soil physical and chemical properties to strength; soil water systems and interactive forces. Visco-elastic property and pressure-volume relationships of soil systems. Stress-strain characteristics of soil under dynamic loads. Application of engineering problems. Laboratory and field investigation methods.
Prerequisite(s): ENGG*2120, ENGG*2230
Department(s): School of Engineering

ENGG*3700 Optimization for Engineers F (3-2) [0.50]
This course serves as an introduction to optimization. Topics to be covered include but are not limited to: linear programming, sensitivity analysis, linear integer programming technique, dynamic programming, Markov chains, transportation method, decision analysis, and queuing theory.
Prerequisite(s): CIS*1500, MATH*2130, MATH*2270
Department(s): School of Engineering

ENGG*3830 Bio-Process Engineering F (3-1) [0.50]
Application of engineering principles to the processing of biological products in the biological and food industry. Analysis and design of unit processes such as sedimentation, centrifugation, filtration, milling and mixing involving rheology and non-Newtonian fluid dynamics of biological materials. Analysis of heat and mass balances for drying, evaporation, distillation and extraction.
Prerequisite(s): ENGG*2230, ENGG*2660
Co-requisite(s): ENGG*3260
Department(s): School of Engineering

ENGG*4000 Proposal for Engineering Design IV S,F (0-0) [0.00]
In this course students will prepare a proposal for the design project that will be completed in the Engineering Design IV course in their program of study. Teams normally of 3 to 4 students (single student groups not allowed) will prepare the proposal, providing details on the proposed project, identify the group members and identify the faculty advisor, who has a P.Eng.. Students are responsible for creating their own design group and securing a faculty advisor.
Prerequisite(s): ENGG*3100
Restriction(s): Registration in the semester preceding the last semester of the BENG Program. Instructor consent required. Restriction waiver requests are handled by the Director, School of Engineering, or designate.
Department(s): School of Engineering

ENGG*4030 Manufacturing System Design W (3-3) [0.75]
Students work in groups to design a manufacturing system to produce a specific product. Choices must be made about the materials to be used, the methods to manufacture each part of the product and the final assembly and/or packaging process. Attention is paid to economics and efficiency of the overall manufacturing system.
Prerequisite(s): ENGG*2180, ENGG*3070
Department(s): School of Engineering
### XII. Course Descriptions, Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGG*4040</td>
<td>Medical Imaging Modalities F (3-2) [0.50]</td>
<td>The course will cover the basic knowledge of medical imaging systems, how they operate and to what uses they can be applied. Systems covered will include x-ray radiography, computed tomography, magnetic resonance imaging, positron emission tomography, gamma cameras, and ultrasound imaging. Emphasis will be on the underlying physics and computation, highlighting factors affecting image quality, patient safety, and clinical use. <strong>Prerequisite(s):</strong> MATH<em>1210, PHYS</em>1130 <strong>Restriction(s):</strong> Restricted to students in BENG, BSCH,BMPH <strong>Department(s):</strong> School of Engineering</td>
</tr>
<tr>
<td>ENGG*4050</td>
<td>Quality Control W (3-2) [0.50]</td>
<td>The basic techniques and regulations surrounding quality control in a generic manufacturing environment are covered. The topics covered include: total quality management including relevant ISO regulations, six sigma, reliability, statistical process control, acceptance sampling and 2k factorial design of experiments. <strong>Prerequisite(s):</strong> STAT*2120 <strong>Department(s):</strong> School of Engineering</td>
</tr>
<tr>
<td>ENGG*4060</td>
<td>Biomedical Signals Processing W (3-2) [0.50]</td>
<td>This course will cover the generation of biomedical signals, detection and measurement, and processing. The physiology of electrical signal generation will cover ionic transport in cellular membranes and propagation of electrical signals in cells and tissues. The range of biomedical signals covered includes such common signals as the electromyogram (EMG), the electrocardiogram (ECG), the electroencephalogram (EEG). Detection and measurement will cover electrode technology, instrumentation amplifiers and safety concerns. Processing includes filtering, frequency content analysis, removal of artifacts, signal correlation, and event detection. <strong>Prerequisite(s):</strong> ENGG*3390 <strong>Department(s):</strong> School of Engineering</td>
</tr>
<tr>
<td>ENGG*4070</td>
<td>Life Cycle Assessment for Sustainable Design W (3-2) [0.50]</td>
<td>This course will introduce students to the fundamental concepts related to interaction of industrial and environmental/ecological systems, sustainability challenges facing the current generation, and systems-based approaches required to create sustainable solutions for society. Students will understand the concepts and the scientific method as it applies to a systems-based, transdisciplinary approach to sustainability, and will be prepared to identify problems in sustainability and formulate appropriate solutions based on scientific research, applied science, social and economic issues. The basic concepts of life cycle assessment (LCA) will be discussed, along with life cycle inventory (LCI) and life cycle impact assessment (LCIA) including the social and economic dimensions. The application of life cycle assessment methodology using appropriate case studies will be presented. <strong>Prerequisite(s):</strong> ENGG<em>2100, ENGG</em>3240 <strong>Department(s):</strong> School of Engineering</td>
</tr>
<tr>
<td>ENGG*4080</td>
<td>Micro and Nano-Scale Electronics F (3-2) [0.50]</td>
<td>The purpose of this course is to describe the operating principles of analog integrated micro and nano electronic circuits and to teach how to design and use such circuits systems. Course topics include: device and circuit fabrication in silicon and non-silicon based technologies; operation and layout of active and passive elements; analog and switched-capacitor filters; analog-to-digital and digital-to-analog converters; amplifiers; oscillators and circuits for radio-frequency and optical communications; readout channels for integrated sensors, and analog integrated circuits for mechatronics and bioengineering. The main emphasis is on device models, circuit operation, and design techniques. <strong>Prerequisite(s):</strong> ENGG*3450 <strong>Department(s):</strong> School of Engineering</td>
</tr>
<tr>
<td>ENGG*4090</td>
<td>Food and Beverage Engineering W (3-3) [0.75]</td>
<td>Students work in groups to design a system for manufacturing a specific food or beverage product. Choices are made about the specific processes to be used, the final packaging and marketing of the product. Attention is paid to the economics and efficiency of the overall production process. <strong>Prerequisite(s):</strong> ENGG<em>3070, ENGG</em>3510, MICR<em>1020 <strong>Co-requisite(s):</strong> ENGG</em>2660, ENGG<em>4050, ENGG</em>4280 <strong>Department(s):</strong> School of Engineering</td>
</tr>
<tr>
<td>ENGG*4110</td>
<td>Biological Engineering Design IV F,W (2-6) [1.00]</td>
<td>This is the capstone design course for the Biological Engineering program. Teams normally of 3-4 students apply engineering analysis and design principles to a problem in a biological system or process. A completely specified solution at the level of preliminary or final design is required, including assessment of socio-economic and environmental impact. This is a small group design that requires reports and a poster presentation to a professional standard. Ethics and legal case studies relevant to professional engineering practice are presented during the lectures. Only students currently registered in ENGG<em>4000 will be permitted to select this course. <strong>Prerequisite(s):</strong> All 1000 and 2000 level core courses and ENGG</em>4000 <strong>Restriction(s):</strong> Registration in semester 8 (last semester) of the BENG program and in a maximum of 3.25 credits registration. Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses. Restriction waiver requests are handled by the Director, School of Engineering, or designate. <strong>Department(s):</strong> School of Engineering</td>
</tr>
<tr>
<td>ENGG*4120</td>
<td>Engineering Systems and Computing Design IV F,W (2-6) [1.00]</td>
<td>This is the capstone design course for the Engineering Systems and Computing program. Teams normally of 3-4 students apply engineering analysis and design principles to a problem involving control system, computer hardware or computer software technology. A completely specified solution at the level of preliminary or final design is required, including assessment of socio-economic and environmental impact. This is a small group design that requires reports and a poster presentation to a professional standard. Ethics and legal case studies relevant to professional engineering practice are presented during the lectures. Only students currently registered in ENGG<em>4000 will be permitted to select this course. <strong>Prerequisite(s):</strong> All 1000 and 2000 level core courses and ENGG</em>4000 <strong>Restriction(s):</strong> Registration in semester 8 (last semester) of the BENG program and in a maximum of 3.25 credits registration. Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses. Restriction waiver requests are handled by the Director, School of Engineering, or designate. <strong>Department(s):</strong> School of Engineering</td>
</tr>
<tr>
<td>ENGG*4130</td>
<td>Environmental Engineering Design IV F,W (2-6) [1.00]</td>
<td>This is the capstone design course for the Environmental Engineering program. Teams normally of 3-4 students apply engineering analysis and design principles to an environmental engineering problem. A completely specified solution at the level of preliminary or final design is required, including assessment of socio-economic and environmental impact. This is a small group design that requires reports and a poster presentation to a professional standard. Ethics and legal case studies relevant to professional engineering practice are presented during the lectures. Only students currently registered in ENGG<em>4000 will be permitted to select this course. <strong>Prerequisite(s):</strong> All 1000 and 2000 level core courses and ENGG</em>4000 <strong>Restriction(s):</strong> Registration in semester 8 (last semester) of the BENG program and in a maximum of 3.25 credits registration. Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses. Restriction waiver requests are handled by the Director, School of Engineering, or designate. <strong>Department(s):</strong> School of Engineering</td>
</tr>
<tr>
<td>ENGG*4150</td>
<td>Water Resources Engineering Design IV F,W (2-6) [1.00]</td>
<td>This is the capstone design course for the Water Resources Engineering program. Teams normally of 3-4 students apply engineering analysis and design principles to a problem involving water resources or wastewater engineering. A completely specified solution at the level of preliminary or final design is required, including assessment of socio-economic and environmental impact. This is a small group design that requires reports and a poster presentation to a professional standard. Ethics and legal case studies relevant to professional engineering practice are presented during the lectures. Only students currently registered in ENGG<em>4000 will be permitted to select this course. <strong>Prerequisite(s):</strong> All 1000 and 2000 level core courses and ENGG</em>4000 <strong>Restriction(s):</strong> Registration in semester 8 (last semester) of the BENG program and in a maximum of 3.25 credits registration. Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses. Restriction waiver requests are handled by the Director, School of Engineering, or designate. <strong>Department(s):</strong> School of Engineering</td>
</tr>
</tbody>
</table>
ENGG*4160 Mechanical Engineering Design IV F,W (2-6) [1.00]
This is the capstone design course for the Mechanical Engineering program. Teams of 3-4 students apply engineering analysis and design principles to a mechanical engineering problem. A completely specified solution at the level of preliminary or final design is required, including assessment of socio-economic and environmental impact.

This is a small group design that requires reports and a poster presentation to a professional standard. ETHICS and legal case studies relevant to professional engineering practice are presented during the lectures. Only students currently registered in ENGG*4000 will be permitted to select this course.

Prerequisite(s): All 1000 and 2000 level core courses and ENGG*4000
Restriction(s): Registration in semester 8 (last semester) of the BENG program and in a maximum of 3.25 credits registration. Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses.
Restriction waiver requests are handled by the Director, School of Engineering, or designate.

Department(s): School of Engineering

ENGG*4170 Computer Engineering Design IV F,W (2-6) [1.00]
This is the capstone design course for the Computer Engineering program. Teams of normally 3-4 students apply engineering analysis and design principles to a computer engineering problem. A completely specified solution at the level of preliminary or final design is required, including assessment of socio-economic and environmental impact.

This is a small group design that requires reports and a poster presentation to a professional standard. Ethics and legal case studies relevant to professional engineering practice are presented during the lectures. Only students currently registered in ENGG*4000 will be permitted to select this course.

Prerequisite(s): All 1000 and 2000 level core courses and ENGG*4000
Restriction(s): Registration in semester 8 (last semester) of the BENG program and in a maximum of 3.25 credits registration. Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses.
Restriction waiver requests are handled by the Director, School of Engineering, or designate.

Department(s): School of Engineering

ENGG*4180 Biomedical Engineering Design IV F,W (2-6) [1.00]
This is the capstone design course for the Biomedical Engineering program. Teams of normally 3-4 students apply engineering analysis and design principles to a biomedical engineering problem. A completely specified solution at the level of preliminary or final design is required, including assessment of socio-economic and environmental impact.

This is a small group design that requires reports and a poster presentation to a professional standard. Ethics and legal case studies relevant to professional engineering practice are presented during the lectures. Only students currently registered in ENGG*4000 will be permitted to select this course.

Prerequisite(s): All 1000 and 2000 level core courses and ENGG*4000
Restriction(s): Registration in semester 8 (last semester) of the BENG program and in a maximum of 3.25 credits registration. Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses.
Restriction waiver requests are handled by the Director, School of Engineering, or designate.

Department(s): School of Engineering

ENGG*4230 Energy Conversion F (3-3) [0.75]
This course introduces the technical criteria for the design of efficient energy conversion processes and systems. It covers review of boilers and cycles, fuel and combustion calculations, and fundamentals of both traditional and emerging energy conversion processes and systems for production of thermal, mechanical, and electrical energy. Topics include fossil, biomass, nuclear fuels, wind, solar, geothermal and fuel cells. Mechanisms for storing energy generated from each of these systems are also studied.

The course also discusses conversion of automobile, renovation of old fossil fuel fired plant, co-firing of opportunity fuel, waste to energy technology, emission, and economics of energy projects.

Prerequisite(s): ENGG*3080, ENGG*3260
Restriction(s): ENGG*2050
Department(s): School of Engineering

ENGG*4240 Site Remediation F (3-1) [0.50]
Remediation of contaminated sites is done to mitigate impacts to the environment and public health. The course will: review the applicable legislation; identify the important soil, water, air and chemical interactions; review the steps of an environmental risk assessment so that contaminated sites can be identified and evaluated to see if remediation is required; and evaluate and appraise various remediation technologies to complete the soil and groundwater remediation.

Co-requisite(s): ENGG*3590, ENGG*3670
Department(s): School of Engineering

ENGG*4250 Watershed Systems Design W (3-2) [0.75]
This course is a hydrological analysis of watershed systems including stream flow for design of structures and channels, flood warning, flood plain mapping and low-flow characteristics. Hydraulic analysis is applied to the design of dams, reservoirs, control structures, energy dissipation structures, bridges and culverts. An analysis of steady flow profiles, flood waves, and sediment transport is applied in the design of natural and constructed channels and protective works for rivers to achieve environmentally sustainable land use in watershed systems.

Prerequisite(s): ENGG*2230, ENGG*3650
Department(s): School of Engineering

ENGG*4280 Digital Process Control Design W (3-2) [0.75]
Design, analysis synthesis and simulation of process control and automation systems. Automation hardware, process compensation techniques and P.I.D. controllers, design and dynamics of final control elements, computer control and the microprocessor.

Prerequisite(s): ENGG*3410
Department(s): School of Engineering

ENGG*4300 Food Processing Engineering Design W (3-2) [0.75]
This course covers the design of various food processing operations and the physico-chemical and mechano-biological response of foods to such operations. Topics include: process evaluation; optimization of operations such as thermal and chemical processes; and rheological properties of various food forms.

Prerequisite(s): ENGG*3430 or FOOD*3170
Department(s): School of Engineering

ENGG*4340 Solid and Hazardous Waste Management F (3-2) [0.50]

Prerequisite(s): ENGG*2560 or ENGG*2660
Department(s): School of Engineering

ENGG*4360 Soil-Water Conservation Systems Design F (3-2) [0.75]
Properties of soils and land use governing the occurrence and magnitude of overland flow, soil erosion, infiltration, percolation of soil water, and variations in soil water storage. Design of soil and water management systems and structures to control soil erosion and protect water quality for environmentally and economically sustainable land use planning. Design of surface and subsurface drainage systems for rural land. Design of sprinkler and trickle irrigation systems.

Prerequisite(s): ENGG*2230, ENGG*3650, ENGG*3670
Department(s): School of Engineering
ENGG*4370 Urban Water Systems Design F (3-2) [0.75]
Estimation of water quantity and quality needed for urban water supply and drainage.
Design of water supply, pumping systems, pipe networks and distributed storage reservoirs from analysis of steady and transient, pressurized and free surface flow. Rates of generation of flows and pollutants to sanitary and storm sewers, design of buried pipes and open channel drainage systems with structures for flow and pollution control. Modeling of water systems for sustainable urban development.
Prerequisite(s): ENGG*2230, ENGG*3650
Department(s): School of Engineering

ENGG*4380 Bioreactor Design F (3-2) [0.75]
Topics in this course include: modeling and design of batch and continuous bioreactors based on biological growth kinetics and mass balances; gas-liquid mass transfer for aeration and agitation; instrumentation; and control.
Prerequisite(s): ENGG*3160
Department(s): School of Engineering

ENGG*4390 Bio-instrumentation Design F (3-2) [0.75]
Theory and selection criteria of devices used in measurements in biological systems; design of complete measurement systems including transducers, signal conditioning and recording components; error analysis. Differences between measurements in biological and physical systems.
Prerequisite(s): ENGG*3450
Department(s): School of Engineering

ENGG*4400 Biomechanical Engineering Design W (3-2) [0.75]
This course covers concept development, design, manufacture and testing of biomechanical devices including athletic equipment, assistive devices, medical implants and tools. Other topics include the biomechanical factors influencing design, regulatory issues, current development trends, and the possible future direction of design and technology.
Prerequisite(s): 6.00 ENGG credits including ENGG*3150, ENGG*3170
Department(s): School of Engineering

ENGG*4420 Real-time Systems Design W (3-3) [0.75]
This course teaches real-time concepts from a system and computing perspective covering topics related to four major areas. Real-time computer control and system modeling area teaches basic real-time design and system modeling concepts for hard and soft real-time computer control applications. Real-time Operating Systems (RTOS) area introduces common kernel objects and inter-task communication and synchronization using examples from current commercial RTOS. Topics in the area of scheduling present theoretical results related to uniprocessor and multiprocessor scheduling algorithms and topics in the area of fault tolerance and reliability present current techniques at software and hardware level.
Prerequisite(s): ENGG*2400, ENGG*3640
Department(s): School of Engineering

ENGG*4430 Neuro-Fuzzy and Soft Computing Systems W (3-0) [0.50]
This course covers the basics of fuzzy systems, neural networks and neuro-fuzzy systems. The main focus is the concepts and algorithms of fuzzy sets, rules, and reasoning, as well as neural network structures, supervised learning and unsupervised learning of neural networks, and hybrid neuro-fuzzy systems. The applications of neural networks and fuzzy systems to control systems, signal processing, systems modeling and systems identification will be presented through examples.
Prerequisite(s): ENGG*3410
Department(s): School of Engineering

ENGG*4440 Computational Fluid Dynamics W (3-2) [0.50]
Computational methods for fluid mechanics form the core of this course. The concepts of modelling are covered including numerical analysis, the governing equations for fluid problems and finite discretization methods. Mathematical models for turbulence are presented and the student is exposed to the use of commercial software for the solution of complex problems in fluid dynamics.
Prerequisite(s): ENGG*2230, ENGG*3370
Department(s): School of Engineering

ENGG*44450 Large-Scale Software Architecture Engineering F (3-2) [0.50]
This course introduces the students to the analysis, synthesis and design of large-scale software systems at the architectural level. This is in contrast to the algorithmic and data structure viewpoint of most software systems. Large-scale software systems are complex, execute on many processors, under different operating systems, use a particular or many language(s) of implementation, and typically rely on system layers, network connectivity, messaging and data management and hardware interfacing. The material covered includes architectural styles, case studies, architectural design techniques, formal models, specifications and architectural design tools. The laboratory sessions will expose the students to analyzing and redesigning an existing large-scale software system.
Prerequisite(s): CIS*2420 or CIS*2520, ENGG*2100
Department(s): School of Engineering

ENGG*4460 Robotic Systems Design F (3-3) [0.50]
This course covers robot technology fundamentals, mathematical representation of kinematics, planning and execution of robot trajectories, introduction to robot languages, programming of robotic systems, different application domains for robots (e.g. assembly, manufacturing, medical, services, etc.), and robot sensors. The goal of this course is to provide students with a comprehensive background, approaches and skills to apply robotics technology to real world engineering applications and problems.
Prerequisite(s): ENGG*1500, ENGG*2400
Department(s): School of Engineering

ENGG*4470 Finite Element Analysis F (3-2) [0.50]
The theory of finite element analysis is presented including element derivation and solution procedures. Students use a finite element package to solve problems based on static and dynamic applications in mechanical systems. Examples are chosen from classical machines as well as biological systems.
Prerequisite(s): ENGG*2160, MATH*2130, MATH*2270
Department(s): School of Engineering

ENGG*4480 Advanced Mechatronics Systems Design W (3-3) [0.75]
The course is a follow up to the introductory mechatronics course and aims at covering advanced topics that are necessary in developing mechatronic systems. Topics include: signal conditioning and filtering for mechatronics system including advanced filters such as Kalman filters; important/advanced electronic circuits for mechatronics systems; microcontroller interfacing and programming; design and development of motion control for mechatronics systems including PLC; introduction of integrated complex mechatronics systems: concept, structure, and applications. Through a design project, students will use and apply these concepts in building a complex mechatronics system with advanced features.
Prerequisite(s): ENGG*3490
Department(s): School of Engineering

ENGG*4510 Assessment & Management of Risk W (3-1) [0.50]
This course will develop the bases by which risk to human health and the environment can be assessed. Issues of hazardous waste cleanups, permitting of water and air discharges, food safety, flood protection, as examples, are addressed. The course also examines how decisions are made to manage the risks to acceptable levels.
Prerequisite(s): STAT*2040 or STAT*2120
Department(s): School of Engineering

ENGG*4540 Advanced Computer Architecture F (3-2) [0.50]
This course covers topics such as: basics of pipeline structure, advanced pipelining and instruction level parallelism, multiprocessor and thread-level parallelism, memory-hierarchy design (main memory, virtual memory, caches), storage systems, interconnection networks, multiprocessor architectures (centralized and distributed). Advanced topics related to new emerging computer architectures will also be presented. The emphasis in each topic is on fundamental limitations and the trade-offs involved in designing computer systems, including memory and processing bandwidth, network bandwidth and latency, synchronization, and storage system bandwidth and latency.
Prerequisite(s): ENGG*3380
Department(s): School of Engineering

ENGG*4550 VLSI Digital Design W (3-2) [0.50]
This course introduces the students to the analysis, synthesis and design of Very Large Scale integration (VLSI) digital circuits and implementing them in silicon. The topics of this course are presented at three levels of design abstraction. At device level: MOS diode; MOS (FET) transistor; interconnect wire. At circuit level: CMOS inverter; static CMOS gates (NAND, NOR); dynamic gates (NAND, NOR); static latches and registers; dynamic latches and registers; pipelining principles and circuit styles; BICMOS logic circuits. At system level; implementation strategies for digital IC’s; interconnect at system level; timing issues in digital circuits (clock structures); the adder; the multiplier; the shifter; memory design and array structure; low power design circuits and architectures.
Prerequisite(s): ENGG*2410, ENGG*2450, ENGG*3450
Department(s): School of Engineering
### ENGG*4560 Embedded System Design W (3-3) [0.75]
This course introduces the basic principles of embedded system design. It utilizes advanced hardware/software abstractions to help design complex systems. Topics include: design of embedded CPUs; embedded architecture cores; system-on-chip designs and integration using processor cores and dedicated core modules; embedded computing platforms; embedded programming design and analysis; processes and operating systems; networks for embedded systems; distributed embedded architectures; design examples that target robotics, automobile, and communication systems.

*Prerequisite(s): ENGG*3380 or ENGG*3640
*Department(s): School of Engineering

### ENGG*4580 Sustainable Energy Systems Design W (3-3) [0.75]
The analysis and design of sustainable energy systems are presented in this course. Techniques considered include generation of alternative designs to satisfy a problem definition; evaluation of alternative designs; application of modeling simulations and cost analyses.

*Prerequisite(s): ENGG*3080, ENGG*3370, ENGG*3430
*Department(s): School of Engineering

### ENGG*4660 Medical Image Processing W (3-2) [0.50]
This course covers the fundamentals of medical imaging from both the processing of digital images and the physics of image formation. Image processing topics covered include: fundamentals of resolution and quantization; linear systems as applied to multi-dimensional continuous and discrete systems including the relationship between the point spread functions and modulation transfer function; point operations such as contrast enhancement, histogram equalization, and H and D curves, geometric operations for distortion correction, including interpolation methods; linear filtering in both the spatial and spatial-frequency domains; and image restoration and inverse filtering. The physics of the following imaging modalities with emphasis on the parameters which effect image quality will be covered: x-ray radiology, MRI, ultrasound, and nuclear medicine.

*Prerequisite(s): ENGG*3390
*Department(s): School of Engineering

### ENGG*4680 Multidisciplinary Engineering Design W (2-4) [0.75]
This is a general design course for students registered in the B. Eng. major in Biomedical Engineering and who do not wish to develop a strong specialization in one of the specific areas of the program. Students work in groups to develop a general Biomedical engineering design. Special attention is paid to the sustainability of the design, its economic feasibility and overall efficiency.

*Prerequisite(s): ENGG*3100
*Department(s): School of Engineering

### ENGG*4720 Physical Design Automation W (3-2) [0.50]
This course presents the applications of a number of important optimization techniques (such as linear programming, integer programming, simulated annealing, and genetic algorithms) to various design-automation problems, including: logic partitioning, floorplanning, placement, global routing, detailed routing, compaction, and performance-driven layout.

*Prerequisite(s): CIS*2500, CIS*3490, ENGG*3700
*Department(s): School of Engineering

### ENGG*4760 Biological Wastewater Treatment Design W (3-2) [0.50]
The course applies design principles for a variety of biological treatment systems for both municipal and industrial wastewater. This involves the design of suspended growth and attached growth processes, anaerobic digestion, sludge processing and utilization, water reuse and resource recovery facilities.

*Prerequisite(s): ENGG*3590
*Restriction(s): ENGG*4260
*Department(s): School of Engineering

### ENGG*4870 Physical & Chemical Water and Wastewater Treatment Design F (3-2) [0.50]
This course focuses on the theory, application, and design principles of physical and chemical operations and processes for the treatment of water and wastewater. This involves the design of physical and chemical unit operations, and evaluating the optimum combination to satisfy the given design constraints and criteria. The optimum designs integrate engineering science, basic science, economics, and health and safety for workers and the public.

*Prerequisite(s): ENGG*3590
*Restriction(s): ENGG*4260
*Department(s): School of Engineering

### ENGG*4810 Control of Atmospheric Particulates F (3-2) [0.50]
The focus of this course is understanding, analyzing and designing conventional and innovative atmospheric particulate control systems. The properties and transport of atmospheric particulates, and the principles of cyclones, filtration and electrostatic precipitation will be taught through theory, simulations, experiments and a design project.

*Prerequisite(s): 6.00 credits of ENGG courses, ENGG*2230, ENGG*2450, MATH*2130
*Restriction(s): ENGG*4330
*Department(s): School of Engineering

### ENGG*4820 Atmospheric Emission Control: Combustion Systems W (3-2) [0.50]
Combustion systems are an essential part of our society, however, they are also the dominant source of atmospheric pollutants. This course will focus on investigation of combustion systems for the purpose of reducing atmospheric emissions.

*Prerequisite(s): ENGG*2560, ENGG*3260
*Co-requisite(s): ENGG*3430
*Restriction(s): ENGG*4330
*Department(s): School of Engineering
ENGL*1080 and ENGL*2080 provide a strong foundation for English studies at the University level and are required courses for students intending to major or minor in English. These linked courses expose students not only to a broad range of texts from different countries and historical periods but also to some of the exciting developments in the discipline.

2. Honours major students are required to take the seminar courses ENGL*2120, ENGL*2130, ENGL*3940, ENGL*3960, preferably in their 3rd, 4th, 5th and 6th semesters. ENGL*1080 is a pre-requisite to ENGL*2120 and ENGL*2130; ENGL*2080 is a pre-requisite to ENGL*3940 and ENGL*3960.

3. Honours major students are required to take one 4000-level seminar, preferably in their 7th and 8th semesters. The prerequisites for the 4000-level seminars are ENGL*2080 plus one of ENGL*2120, ENGL*2130 plus one of ENGL*3940, ENGL*3960.

4. Honours minor students are required to take the seminar course ENGL*2120 and one of ENGL*2130, ENGL*3940, ENGL*3960, preferably in their 3rd to 6th semester.

5. Many English lecture courses are offered on alternate years only and many English seminars have variable content. For more information, students should consult the School's home page at http://www.arts.uoguelph.ca/sets/.

6. Many English lecture courses are reading-intensive while seminar courses are writing and presentation-intensive. Honours major students are advised to take two lectures and one seminar per semester beginning in their 3rd semester.

7. WRITING- AND PRESENTATION-INTENSIVE: Seminars emphasize written and oral work to help students develop the critical reading and writing skills essential to their learning throughout the curriculum.

8. READING-INTENSIVE: Lectures emphasize breadth of reading, contexts, and comparisons, to help students develop the knowledge base essential to their understanding of the field. In order to allow essay-writing to be concentrated in seminars, assignments in lecture courses will not predominantly take the traditional essay form but a range of other formats.

ENGL*1030 Effective Writing S,F,W (3-0) [0.50]
This course is designed primarily for those not pursuing a specialization in English and focuses on the development of the skills for effective writing. Topics will include sentence and paragraph structure, essay organization, and the implementation of convincing written arguments. Students will apply these skills to the completion of several written assignments, culminating in a short work of non-fiction prose.
Offering(s): Also offered through Distance Education format.
Department(s): School of English and Theatre Studies

ENGL*1080 Literatures in English I: Reading the Past F,W (3-0) [0.50]
This course is focused on the disciplinary skill of close reading and is intended for students planning to specialize in the study of English Literature. Through a series of case studies, the course introduces students to a range of historical and national writings in prose, poetry, and drama, and to some of the key terms and concepts in contemporary literary studies. Lectures and discussions address selected works from the Middle Ages onwards, the periods in which these works were produced, and some of the ways in which these texts have been or could be interpreted. ENGL*1080 and its companion course, ENGL*2080, are required for a major or minor in English. Students are encouraged to enrol in ENGL*2080 in the semester after they have completed ENGL*1080. Reading- and writing-intensive course.
Restriction(s): This is a priority access course. Enrolment in the fall semester may be restricted to students registered in the English major, minor, area of concentration, Concentrating Writing minor, or in semesters one or two of the BA or BAS program.
Department(s): School of English and Theatre Studies

ENGL*1200 Reading the Contemporary World F,W (3-0) [0.50]
This course, which is designed primarily for those not planning a specialization in English, introduces students to literary texts and persuasive forms of writing, bringing to the fore some of the links between language and contemporary social and political issues. Course materials will represent diversity in terms of national origins, gender, race, and class. The course emphasizes the use of figurative language as well as the development of students' critical reading and writing skills. Students planning to major or minor or pursue an area of concentration in English must take ENGL*1080 and ENGL*2080, but may also take ENGL*1200 and count it as an elective lecture.
Offering(s): Also offered through Distance Education format.
Department(s): School of English and Theatre Studies

ENGL*1410 Major Writers U (3-0) [0.50]
This course, which is designed primarily for those not planning a specialization in English, offers an introduction to the study of literature through a chronological consideration of works by selected major authors from the Middle Ages to the present century, in relation to their social, intellectual and literary backgrounds. The course emphasizes the use of figurative language as well as the development of students' critical reading and writing skills. Students planning to major or minor or pursue an area of concentration in English must take ENGL*1080 and ENGL*2080, but may also take ENGL*1410.
Department(s): School of English and Theatre Studies

ENGL*1500 Medicine and Literature W (3-0) [0.50]
This course explores the representational and cultural practices concerning health care and the body. Students will examine how literary texts represent, interpret, and critique the cultures of biomedical science, the clinic, and the hospital. Areas of interest include disease, illness, health, disability, and psychological and physiological trauma.
Department(s): School of English and Theatre Studies

ENGL*2040 Latina/o Literature and Cultural Production: Intro F (3-0) [0.50]
This survey course introduces students to the terms, methodologies, and debates that form the interdisciplinary critical practice of Latina/o Studies. The course takes a pan-Latina/o approach to the study of English-language and cultural production by various Latina/os primarily in the U.S. Because different Latina/o groups have been concentrated in particular U.S. regions and cities, the approach allows students to study how Latina/o literature and art have shaped the politics and culture of different regions and cities.
Reading-intensive course.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 2.00 credits
Department(s): School of English and Theatre Studies

ENGL*2080 Literatures in English II: Finding a Critical Voice F (3-0) [0.50]
This course revisits the historical, national, and genre sweep of ENGL*1080 by conducting a range of specific, more in-depth studies of particular works (including some of the texts examined in ENGL*1080) in their historical moments. Seminars help students to develop a range of critical approaches through oral presentations and essay-writing. Students are encouraged to enrol in ENGL*2080 in the semester after they have completed ENGL*1080.
Prerequisite(s): ENGL*1080
Equates to: ENGL*2060
Department(s): School of English and Theatre Studies

ENGL*2090 Studies in Shakespeare W (3-0) [0.50]
This course focuses on Shakespeare as both a writer and an enduring cultural presence. It may, at the instructor's choice, focus on works by Shakespeare as well as works by others in response to Shakespeare, in Shakespeare's original historical context or in more contemporary contexts. The course may address, among others, genre, performance, adaptation, the politics of Shakespearean interpretation, including issues such as gender, subjectivity, empire, and nation. Reading-intensive course.
Prerequisite(s): 2.00 credits
Restriction(s): ENGL*3020, ENGL*3120
Department(s): School of English and Theatre Studies

ENGL*2120 Seminar: Critical Practices F,W (3-0) [0.50]
This course guides students through a range of critical approaches and explores their implications for readings of a limited number of literary texts. The seminar's main areas of concentration are: (1) close reading, centering on the way a particular poem, work of fiction, or play works in its details and overall structure; (2) critical approaches and methodologies; (3) critical writing and discussion. (Choices of approaches and texts will be determined by individual instructors.) Writing- and presentation-intensive course.
Prerequisite(s): ENGL*1080
Restriction(s): Registration in the English major, minor or area of concentration, or minor in Creative Writing.
Department(s): School of English and Theatre Studies

ENGL*2130 Seminar: Literature and Social Change F,W (3-0) [0.50]
This course explores the social and cultural work that literary texts perform. Seminars will illuminate such categories as gender, sexuality, nation, race, ethnicity, and class; particular ways in which they are written into a limited number of literary works; and some of the critical debates surrounding our interpretations of those processes. (Choices of approaches and texts will be determined by individual instructors.) Writing- and presentation-intensive course.
Prerequisite(s): ENGL*1080
Restriction(s): Registration in the English major, minor or area of concentration, or minor in Creative Writing.
Department(s): School of English and Theatre Studies

Last Revision: July 4, 2019  2019-2020 Undergraduate Calendar
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Attributes</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL*2190</td>
<td>Queer Literatures and Cultures W (3-0) [0.50]</td>
<td>This course examines the ways in which gender, sexuality, and identity politics are addressed, critiqued, and shaped by queer literature, performance, and media. This course will consider the meanings of “queer” itself and explore how queerness intersects with race, class, gender, sex, and other forms of social difference.</td>
<td>Offering(s): Offered in odd-numbered years.</td>
<td>2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
</tr>
<tr>
<td>ENGL*2200 Postcolonial Literatures, Film, and Other Media F (3-0) [0.50]</td>
<td>This course introduces students to contemporary literatures, film, and other media that engage with the impact of European colonization on eighty-five percent of the globe. The course may include material from Africa, Australia, the Americas, the Caribbean, the Indian Subcontinent, and the Pacific. Reading-intensive course</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL*2270 Fairy, Trickster, and Mythical Hero F (3-0) [0.50]</td>
<td>This course focuses on the everyday emergence of the fantastic, the otherworldly, and the extraordinary in commonly told cultural narratives such as the fairy tale, trickster tale and myth. The course may focus on tales of specific regions (e.g. Europe, North America, the South Pacific), and may cross a range of genres (oral tale, pantomime, short story, film, graphic novel) as well as historical periods. The course may also address continuities and discontinuities in versions of traditional narratives created by tellers, writers, and other artists.</td>
<td>Offering(s): Offered in even-numbered years.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL*2280 Sporting Bodies W (3-0) [0.50]</td>
<td>This course examines various aspects of sports and play as they are manifested in a range of literary texts and other cultural forms. Because the emergence of sport as a social practice has been so intertwined with notions of regulation, performance, and fandom, sporting culture offers a valuable site for looking at questions of identity and social relations more broadly.</td>
<td>Offering(s): Offered in even-numbered years.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL*2290 Outlaws W (3-0) [0.50]</td>
<td>Literary narratives about crime and the criminal have both glamorized the outlaw and idealized the restoration of law and order. Students will examine how literary narratives frame the figure of the outlaw in order to: contemplate the relationship between the individual and law, as well as between outlaw communities and the law; shape popular understandings of the law and the consequences of breaking the law; interrogate the law’s absolute claim to justice; examine the cost of policing to maintain law and order; and/or critique state power by giving voice to the marginalized.</td>
<td>Offering(s): Offered in odd-numbered years.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL*2310 Vampires, Ghosts, and Mummies: Literature and the Supernatural F (3-0) [0.50]</td>
<td>While we often dismiss the occult or the supernatural in literature as simple entertainment, this course encourages students to examine how literary works engage the occult and the supernatural in order to address issues of power, race, gender, imperialism and modernity from the nineteenth century to the present.</td>
<td>Offering(s): Offered in odd-numbered years.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL*2330 Print Culture and Cinema F (3-0) [0.50]</td>
<td>This course moves between writing and cinema, in different periods and with different emphases according to the instructor’s expertise. Topics may include: adaptation from page to screen and adaptation theory; the relationship between print forms and early motion picture and between fiction and film; the construction of celebrity and spectatorship in print and movie cultures; questions of “fidelity,” technology, silence and sound, literary prestige and film publicity. Reading-intensive course.</td>
<td>Offering(s): Offered in even-numbered years.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL*2360 Medieval Literature W (3-0) [0.50]</td>
<td>This course introduces students to the literature of the English Middle Ages. Students will read both Old English texts (such as Beowulf and The Wanderer) and Middle English texts (such as Sir Gawain and the Green Knight and selections from The Canterbury Tales) alongside non-literary medieval texts—histories, guides to religious living, and philosophical tracts—that together work to reveal the cultural context in which medieval writers worked. The class will also include representative medieval drama (mystery plays and/or morality plays) and works by and about women (such as the works of Marie de France and Margery Kempe).</td>
<td>Offering(s): Offered in even-numbered years.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Restriction(s): ENGL*3560</td>
<td>Department(s): School of English and Theatre Studies</td>
</tr>
<tr>
<td>ENGL*2560 North American Native Literatures W (3-0) [0.50]</td>
<td>This course explores selected issues, perspectives, and voices within the study of Native literatures and their contexts in North America. One purpose of the course is to raise questions about the meaning of the U.S. - Canadian border for Native writers. Reading-intensive course.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL*2660 Culture, Location, Identity: Minoritized Literatures in Canada and Beyond F (3-0) [0.50]</td>
<td>This course will open up debates around emergent issues, perspectives, and voices in the literatures of minoritized cultures particularly within the North American context. Questions about the meanings of various borders for understanding Canadian negotiations of identity, culture, and location will remain a consistent feature of this variable content course. Reading-intensive course.</td>
<td>Offering(s): Also offered through Distance Education format.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL*2740 Children's Literature F,W (3-0) [0.50]</td>
<td>This course serves as an introduction to the critical study of children's literature and culture. Focusing on selected genres of, issues in, or theoretical approaches to literature for children, this variable-content course explores shifting (and often conflicting) conceptions of childhood, in general, and of children as readers and cultural consumers. Reading-intensive course.</td>
<td>Offering(s): Also offered through Distance Education format.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL*2880 Women in Literature W (3-0) [0.50]</td>
<td>This variable-content course will involve the study and discussion of poems, stories, novels and plays by or about women. Reading-intensive course.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL*2920 Elements of Creative Writing F,W (3-0) [0.50]</td>
<td>This lecture course focuses on teaching character, dialogue, setting and plot. Students and other artists.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL*2970 Advanced Creative Writing Beyond F (3-0) [0.50]</td>
<td>This variable-content course will involve the study and discussion of poems, stories, novels and plays by or about women. Reading-intensive course.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL*2970 Advanced Creative Writing Beyond F (3-0) [0.50]</td>
<td>This variable-content course will involve the study and discussion of poems, stories, novels and plays by or about women. Reading-intensive course.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL*2970 Advanced Creative Writing Beyond F (3-0) [0.50]</td>
<td>This variable-content course will involve the study and discussion of poems, stories, novels and plays by or about women. Reading-intensive course.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL*2970 Advanced Creative Writing Beyond F (3-0) [0.50]</td>
<td>This variable-content course will involve the study and discussion of poems, stories, novels and plays by or about women. Reading-intensive course.</td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department(s): School of English and Theatre Studies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### XII. Course Descriptions, English

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Department(s)</th>
<th>Offering(s)</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL*1080</td>
<td>Intermediate Fiction Writing Workshop F,W (3-0) [0.50]</td>
<td>School of English and Theatre Studies</td>
<td>Offered in even-numbered years.</td>
<td>ENGL<em>1080, ENGL</em>2920</td>
<td></td>
<td>School of English and Theatre Studies</td>
<td>Registration in the Creative Writing minor.</td>
<td></td>
</tr>
<tr>
<td>ENGL*2940</td>
<td>Intermediate Poetry Writing Workshop F (3-0) [0.50]</td>
<td>School of English and Theatre Studies</td>
<td>Offered in odd-numbered years.</td>
<td>ENGL<em>1080, ENGL</em>2920</td>
<td></td>
<td>School of English and Theatre Studies</td>
<td>Registration in the Creative Writing minor.</td>
<td></td>
</tr>
<tr>
<td>ENGL*3220</td>
<td>Representing Britain: 18th- &amp; 19th-Century Literature F (3-0) [0.50]</td>
<td>School of English and Theatre Studies</td>
<td>Offered in even-numbered years.</td>
<td></td>
<td></td>
<td>School of English and Theatre Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL*3090</td>
<td>Special Topics in Creative Writing Workshop F,W (3-0) [0.50]</td>
<td>School of English and Theatre Studies</td>
<td>Offered in odd-numbered years.</td>
<td>ENGL<em>1080, ENGL</em>2920</td>
<td></td>
<td>School of English and Theatre Studies</td>
<td>Registration in the Creative Writing minor.</td>
<td></td>
</tr>
<tr>
<td>ENGL*3470</td>
<td>Twentieth-Century British Literature I W (2-3) [0.50]</td>
<td>School of English and Theatre Studies</td>
<td>Offered in even-numbered years.</td>
<td>ENGL<em>1080, ENGL</em>2920</td>
<td></td>
<td>School of English and Theatre Studies</td>
<td>Registration in the Creative Writing minor.</td>
<td></td>
</tr>
<tr>
<td>ENGL*3340</td>
<td>British Imperial Culture F (3-0) [0.50]</td>
<td>School of English and Theatre Studies</td>
<td>Offered in even-numbered years.</td>
<td>ENGL<em>1080, ENGL</em>2920</td>
<td></td>
<td>School of English and Theatre Studies</td>
<td>Registration in the Creative Writing minor.</td>
<td></td>
</tr>
<tr>
<td>ENGL*3380</td>
<td>Studies in the History of Literary Production W (3-0) [0.50]</td>
<td>School of English and Theatre Studies</td>
<td>Offered in even-numbered years.</td>
<td>ENGL<em>1080, ENGL</em>2920</td>
<td></td>
<td>School of English and Theatre Studies</td>
<td>Registration in the Creative Writing minor.</td>
<td></td>
</tr>
<tr>
<td>ENGL*3420</td>
<td>20th- &amp; 21st-Century Drama W (3-0) [0.50]</td>
<td>School of English and Theatre Studies</td>
<td>Offered in odd-numbered years.</td>
<td>ENGL<em>1080, ENGL</em>2920</td>
<td></td>
<td>School of English and Theatre Studies</td>
<td>Registration in the Creative Writing minor.</td>
<td></td>
</tr>
<tr>
<td>ENGL*3460</td>
<td>Literature in London U (2-3) [0.50]</td>
<td>School of English and Theatre Studies</td>
<td>Offered in even-numbered years.</td>
<td>ENGL<em>1080, ENGL</em>2920</td>
<td></td>
<td>School of English and Theatre Studies</td>
<td>Registration in the Creative Writing minor.</td>
<td></td>
</tr>
<tr>
<td>ENGL*3470</td>
<td>Twentieth-Century British Literature I W (3-0) [0.50]</td>
<td>School of English and Theatre Studies</td>
<td>Offered in even-numbered years.</td>
<td>ENGL<em>1080, ENGL</em>2920</td>
<td></td>
<td>School of English and Theatre Studies</td>
<td>Registration in the Creative Writing minor.</td>
<td></td>
</tr>
<tr>
<td>ENGL*3480</td>
<td>Twentieth-Century British Literature II F (3-0) [0.50]</td>
<td>School of English and Theatre Studies</td>
<td>Offered in odd-numbered years.</td>
<td>ENGL<em>1080, ENGL</em>2920</td>
<td></td>
<td>School of English and Theatre Studies</td>
<td>Registration in the Creative Writing minor.</td>
<td></td>
</tr>
</tbody>
</table>
ENGL*3540 Writing the United States W (3-0) [0.50]
This course explores the relationship between literary production and political power from the emergence of U.S. culture through the long nineteenth century. Areas of focus may include national fantasy, the literatures of war, imperial expansion, captivity, and genocide; narratives of race and immigration; the cult of domesticity; and the rise of mass culture. Reading-intensive course.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 7.50 credits including 0.50 credits in English (excluding ENGL*1030)
Department(s): School of English and Theatre Studies

ENGL*3550 Modern United States Literatures W (3-0) [0.50]
This course explores powerful examples of modern United States literatures, from about the First World War to the present. The selection is wide, including both traditional and experimental forms; female and male writers from various ethnic and racial groups; and a range of cultural issues. Reading-intensive course.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 7.50 credits including 0.50 credits in English (excluding ENGL*1030)
Department(s): School of English and Theatre Studies

ENGL*3570 Chaucer in Context F (3-0) [0.50]
This course will introduce students to significant aspects of Chaucer's writing read in the context of works by Chaucer's precursors and near contemporaries. Reading-intensive course.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 7.50 credits including 0.50 credits in English (excluding ENGL*1030)
Department(s): School of English and Theatre Studies

ENGL*3630 Writing Canada: Forging the Nation W (3-0) [0.50]
This course focuses on Canadian literature to World War One, examining cultural contestation in the Canadian settler colony among the Canadian, U.S., British, and indigenous peoples. Topics may include the rise of nationalist discourse, race and nation, landscape and the sublime, gothic, sentimental, and historical fiction, children's literature, slavery and resistance narratives, travel and captivity narratives. Reading-intensive course.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 7.50 credits including 0.50 credits in English (excluding ENGL*1030)
Department(s): School of English and Theatre Studies

ENGL*3680 20th- & 21st-Century Canadian Literature and Criticism F (3-0) [0.50]
This course examines Canadian literature and criticism in English from the beginnings of the twentieth century to the present in relation to a variety of social, cultural, and historical contexts. Reading-intensive course.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 7.50 credits including 0.50 credits in English (excluding ENGL*1030)
Department(s): School of English and Theatre Studies

ENGL*3690 History of Literary Criticism F (3-0) [0.50]
This course introduces students to the major critics and texts formative in the development of an English critical tradition. The study will begin with Plato and Aristotle, and proceed from the Renaissance through to modernist critical theory.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 7.50 credits including 0.50 credits in English (excluding ENGL*1030)
Department(s): School of English and Theatre Studies

ENGL*3750 Studies in Postcolonial Literatures W (3-0) [0.50]
This course is a concentrated study in a major sub-area of postcolonial literature. Specific topics will vary each year, but may involve a focus on a particular genre or region such as Africa, Australia, Canada, the Caribbean, India, and the Pacific. Reading-intensive course.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 7.50 credits including 0.50 credits in English (excluding ENGL*1030)
Department(s): School of English and Theatre Studies

ENGL*3760 The Atlantic World W (3-0) [0.50]
This course is a variable-content course designed to consider the intercultural effects which emerge from transnational, colonial, imperial, and/or diasporic relations, through literatures in English addressing the Atlantic and contiguous lands. Texts will be selected from among the rich array of poetry, fiction, memoirs, letters, travel accounts, period histories and ethnographies, autobiographies and folkloric records that formed the literary culture of this period. Attention may be paid to diverse forms of oral and written expression, linguistic changes, the Creole continuum, representations of oceanic space, the erasure and fluidity at work in the metaphoricities of the sea, the evolution of national and racial stereotypes, and religious syncretism. Reading-intensive course.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 7.50 credits including 0.50 credits in English (excluding ENGL*1030)
Department(s): School of English and Theatre Studies

ENGL*3870 Topics in Literary and Cultural Studies U (3-0) [0.50]
These variable-content courses provide opportunities for topics in cross-period studies, inter- and transdisciplinary studies and cultural studies, among others that are not available in regular offerings. Consult the School for specific offerings in a given semester. Reading-intensive course.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 7.50 credits including 0.50 credits in English.
Department(s): School of English and Theatre Studies

ENGL*3880 Topics in Literary and Cultural Studies U (3-0) [0.50]
These variable-content courses provide opportunities for topics in cross-period studies, inter- and transdisciplinary studies and cultural studies, among others that are not available in regular offerings. Consult the School for specific offerings in a given semester. Reading-intensive course.
Prerequisite(s): 1.00 credits in English.
Department(s): School of English and Theatre Studies

ENGL*3940 Seminar: Form, Genre, and Literary Value F, W (3-0) [0.50]
This course focuses on textual conventions as form, style, and genre as they inform the interaction between reader and text. The impact of these conventions on the processes of literary production, reception, the production of meaning, and the assessment of literary value will be explored in relation to a limited number of literary works. (Choice of focus and texts to be determined by individual instructors.) Writing- and presentation-intensive course.
Prerequisite(s): ENGL*2080
Restriction(s): Registration in the English major, minor or area of concentration.
Department(s): School of English and Theatre Studies

ENGL*3960 Seminar: Literature in History F, W (3-0) [0.50]
This course explores the processes by which specific texts or genres emerge from particular historical moments and by which we attempt to reconstruct those historically specific connections. Seminars will focus on such topics as the archive surrounding one text, problems of period and canon, or genres and historical change. (Choice of period and texts will be determined by individual instructors.) Writing- and presentation-intensive course.
Prerequisite(s): ENGL*2080
Restriction(s): Registration in the English major, minor or area of concentration.
Department(s): School of English and Theatre Studies

ENGL*4140 Old English Language and Literature F (3-0) [1.00]
This course provides a rigorous introduction to Old English language and literature. Significantly different from modern English, Old English (or Anglo-Saxon), was spoken in England c. 700-1100 CE. Students will learn to read and translate Old English prose and poetry and will discuss Old English literary texts, some read in the original and some in translation, from a variety of thematic and critical perspectives. The course will culminate in an independent research project that leads to a final critical essay.
Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*3280 Restricted to students in the English major, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.
Department(s): School of English and Theatre Studies

ENGL*4240 Medieval & Early Modern Literatures U (3-0) [1.00]
This course provides the opportunity for intensive study of British literature from the beginnings to 1660. Students are advised to complete a 3000-level lecture course in this subject area prior to enrolling in the 4000-level course.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*4040 Restricted to students in the English major, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.
Department(s): School of English and Theatre Studies
ENGL*4250 18th- & 19th-C Literatures U (3-0) [1.00]
This seminar provides the opportunity for intensive study of British literature from 1660 to 1900. Students are advised to complete a 3000-level lecture course in this subject area prior to enrolling in the 4000-level course.

Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*4050 Restricted to students in the English major, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.

Department(s): School of English and Theatre Studies

ENGL*4270 United States Literatures U (3-0) [1.00]
This seminar provides the opportunity for intensive study of United States literatures. Students are advised to complete a 3000-level lecture course in this subject area prior to enrolling in the 4000-level course.

Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*4070 Restricted to students in the English major, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.

Department(s): School of English and Theatre Studies

ENGL*4280 Canadian Literatures U (3-0) [1.00]
This seminar provides the opportunity for intensive study of Canadian literatures. Students are advised to complete a 3000-level lecture course in this subject area prior to enrolling in the 4000-level course.

Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*4080 Restricted to students in the English major, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.

Department(s): School of English and Theatre Studies

ENGL*4310 Special Studies in English U (3-0) [1.00]
A seminar designed to provide students in semesters 7 and 8 with an opportunity to pursue studies in an area or areas of language or literature not available in other courses. The course may be taught by a visiting professor or members of the school.

Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*4100, ENGL*4110 Restricted to students in the English major, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.

Department(s): School of English and Theatre Studies

ENGL*4400 Postcolonial Literatures U (3-0) [1.00]
This course provides the opportunity for intensive study of a representative selection of literature in English by writers from Africa, India, the Caribbean, Australia, and the Pacific. Students are advised to complete a 3000-level lecture course in this subject area prior to enrolling in the 4000-level course.

Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*4200 Restricted to students in the English major, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.

Department(s): School of English and Theatre Studies

ENGL*4410 Modern & Contemporary Literatures U (3-0) [1.00]
This course provides the opportunity for a study of significant works in fiction, poetry, and drama that demonstrate new approaches in form and content characteristic of 20th- and 21st-century writings in English. Students are advised to complete a 3000-level lecture course in this subject area prior to enrolling in the 4000-level course.

Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*4210 Restricted to students in the English major, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.

Department(s): School of English and Theatre Studies

ENGL*4420 Women's Writings U (3-0) [1.00]
This course provides for intensive study of issues relating to the aesthetic strategies, such as those associated with structure, imagery, and language, devised by women writers to reflect women's experience and perceptions. Students are advised to complete a 3000-level lecture course in this subject area prior to enrolling in the 4000-level course.

Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*4220 Restricted to students in the English majors, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.

Department(s): School of English and Theatre Studies

ENGL*4450 Non-fiction Prose U (3-0) [1.00]
This course offers an intensive study of non-fiction prose. Topics to be explored may include the roles and contexts of public and/or private writing, the role of literary criticism in reading texts sometimes marked as non-literary, the history of non-fictional prose forms, or the formal or ideological uses of the distinctions between fact and fiction.

Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*4300 Restricted to students in the English major, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.

Department(s): School of English and Theatre Studies

ENGL*4720 Creative Writing: Prose/Poetry F,W (3-0) [1.00]
A development and extension of the creative writing/reading skills and techniques introduced in the creative writing workshops. This course will involve the generation and revision of challenging new work, sophisticated critique of the work of other students, and focused discussion of the cultural, social, and political issues in which the practice of creative writing is enmeshed.

Prerequisite(s): 1 of ENGL*2920, ENGL*2940, ENGL*3050, ENGL*3060, ENGL*3070, ENGL*3090
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see departmental website for more information.

Department(s): School of English and Theatre Studies

ENGL*4810 Directed Reading S,F,W (3-0) [0.50]
This course is intended particularly as preparation for ENGL*4910. The student will design a course of readings and assignments with the instructor, whose consent must first be obtained. This option is intended only for students who have performed particularly well within the honours program. Exceptional students may take ENGL*4810 in preparation for a ENGL*4910 creative writing project, on the approval of the instructor.

Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): Instructor consent required.

Department(s): School of English and Theatre Studies

ENGL*4880 20th- & 21st-Century Poetry U (3-0) [1.00]
This seminar provides opportunities to study English-language modern and contemporary poetry. Students are advised to complete a 3000-level lecture course in this subject area prior to enrolling in the 4000-level course.

Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*4680 Restricted to students in the English major, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.

Department(s): School of English and Theatre Studies

ENGL*4890 Contemporary Literary Theory U (3-0) [1.00]
This course will study the major branches of contemporary literary theory. Topics covered will include structuralism, reader-oriented theory, feminist theory, new historicist and materialist critique, postcolonialist critique, and deconstruction.

Prerequisite(s): ENGL*2080, (ENGL*2120 or ENGL*2130), (ENGL*3940 or ENGL*3960)
Restriction(s): ENGL*4690 Restricted to students in the English major, who have completed 14.00 credits with an average of 70% in all course attempts in English. Restricted to students with fewer than 2.00 credits of 4000-level English courses.

Department(s): School of English and Theatre Studies
<table>
<thead>
<tr>
<th>ENGL*4910 Honours English Essay S,F,W (3-0) [0.50]</th>
</tr>
</thead>
<tbody>
<tr>
<td>A major essay (approx. 25 pages) on some subject of special interest to the student is prepared and written under the direction of a faculty member. Consent of the instructor must be obtained and the subject must be approved by the School prior to the semester in which the course is to be taken. This option is intended only for students who have performed particularly well within the honours program. Exceptional students may use ENGL*4910 for creative writing, on the approval of the instructor.</td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
</tr>
<tr>
<td><strong>Restriction(s):</strong></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
</tr>
<tr>
<td>Course Code: ENVM*3500</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Prerequisite(s):</td>
</tr>
<tr>
<td>Restriction(s):</td>
</tr>
<tr>
<td>Department(s):</td>
</tr>
</tbody>
</table>
## Environmental Sciences

### School of Environmental Sciences

Department of Food, Agricultural and Resource Economics

The program in Environmental Sciences is interdisciplinary, involving courses from several different departments. See the B.Sc.(Env.) program information in Section X—Undergraduate Degree Programs.

### ENVS*1030 Introduction to Environmental Sciences F (6-0) [1.00]

This course introduces students to what it means to think critically from an environmental sciences perspective. It covers an introduction to: philosophy of science, philosophy of the environment, the evaluation of scientific evidence, and scientific arguments. The course focuses on how we understand and recognize environmental problems, how we decide what to do about them, and what role science can and should play in these discussions.

**Restriction(s):** ENVS*1100 Registration in the BSC(Env) program or BBRM.EM

**Department(s):** School of Environmental Sciences

### ENVS*1040 Principles of Geology S,F,W (3-0) [0.50]

This course provides an introduction to geological principles, their historical development and application to interpreting Earth materials and processes. This course is suitable for those wishing a general knowledge of Earth sciences.

**Offering(s):** Offered through Distance Education format only.

**Equate(s):** GEOL*1100

**Restriction(s):** May not be taken for credit by students in BBRM, BSC or BSC(Env).

**Department(s):** School of Environmental Sciences

### ENVS*1100 Fundamentals of Environmental Sciences F (3-0) [0.50]

This course introduces students to what it means to think critically from an environmental sciences perspective. It covers an introduction to: philosophy of science, philosophy of the environment, the evaluation of scientific evidence, and scientific arguments. The course focuses on how we understand and recognize environmental problems, how we decide what to do about them, and what role science can and should play in these discussions.

**Restriction(s):** ENVS*1030 Not available to students registered in BSC(Env) program and BBRM.EM

**Department(s):** School of Environmental Sciences

### ENVS*2030 Meteorology and Climatology F (3-2) [0.50]

This course examines solar and terrestrial radiation; pressure systems and winds; atmospheric stability and vertical motions; air masses and fronts; clouds and precipitation; selected topics in applied meteorology including air pollution. The laboratory emphasizes the analysis and use of atmospheric data for solving environmental problems.

**Prerequisite(s):** 1 of IPS*1500, MATH*1080, MATH*1200, PHYS*1070, PHYS*1080, PHYS*1130, PHYS*1300

**Department(s):** School of Environmental Sciences

### ENVS*2040 Plant Health and the Environment W (3-0) [0.50]

This is an interdisciplinary course on the nature and importance of diseases, insects and abiotic stresses on plant productivity and quality. A case history approach will be used to illustrate the biology of plant pests, the principles of pest population management, and related topics.

**Prerequisite(s):** BIOL*1040 or (2 of BIOL*1050, BIOL*1070, BIOL*1080, BIOL*1090)

**Equate(s):** ENVB*2040

**Department(s):** School of Environmental Sciences

### ENVS*2060 Soil Science S,F (3-2) [0.50]

This course is an introduction to the principles of soil science - the origin of soils, their classification and interpretation in natural and modified environments. Soil will be studied as a product of the natural environment, with a focus on formation processes and changes which occur when it is modified through use. A variety of uses including agriculture, forestry, recreation, and urban development will be considered.

**Offering(s):** Also offered through Distance Education format.

**Equate(s):** SOIL*2010

**Restriction(s):** AGR*2320.

**Department(s):** School of Environmental Sciences

### ENVS*2070 Environmental Perspectives and Choice F (3-0) [0.50]

This is an interdisciplinary approach to environmental issues which offers opportunities to investigate social processes and philosophical considerations with respect to the position and influence of humankind, and the development of social conditions, values and economic activities that have led to our present situation. These investigations are carried out within the context of physical environmental considerations, such as the state of the earth, forests, air water and our use of energy, and will lead the student to a detailed consideration of the future.

**Offering(s):** Offered through Distance Education format only.

**Department(s):** School of Environmental Sciences

### ENVS*2080 Introduction to Environmental Microbiology W (2-3) [0.50]

This course will introduce students to environmental microbiology, with a focus on the important roles of microorganisms in various environments such as soil, water and sediments. Discussion will emphasize the physiology, biochemistry, molecular biology and ecology of microorganisms, and how a good understanding of these microbial processes can enable beneficial applications of microorganisms in biotechnology and bioremediation.

**Prerequisite(s):** BIOL*1070, BIOL*1090

**Restriction(s):** ENVM*1020, ENVS*2320

**Department(s):** School of Environmental Sciences

### ENVS*2090 Problem Solving in Environmental Biology W (2-2) [0.50]

This course provides an introduction to current issues and problems in environmental biology. Approaches to characterizing and addressing problems through the systematic application of the scientific method will be critically examined. Students will have the opportunity to practice both oral and written presentation skills.

**Offering(s):** First offering - W21

**Prerequisite(s):** BIOL*1070, BIOL*1090, CHEM*1050, MATH*1080

**Department(s):** School of Environmental Sciences

### ENVS*2120 Introduction to Environmental Stewardship F (3-0) [0.50]

This course provides an introduction to the concepts of resource management, environmental planning and assessment, land stewardship and sustainable development. Case studies of specific issues such as parks and natural heritage conservation, agricultural land loss, and integrated rural resources management will provide insight on approaches to decision making. Included will be discussion of the concept of stewardship as an environmental ethics.

**Offering(s):** Offered through Distance Education format only.

**Department(s):** School of Environmental Sciences

### ENVS*2130 Eating Sustainably in Ontario F,W (3-0) [0.50]

This course is intended to introduce students to the science behind food related issues within the context of Ontario agriculture and food systems. The course will provide students with an overview of the history of agriculture in Ontario and an opportunity to discuss both sides of current debates over food production and associated environmental and human health issues.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** 4.00 credits

**Restriction(s):** May not be taken by students in the BAS, BBRM, BSC, BSC(Agr) or BSC(Env) programs

**Department(s):** School of Environmental Sciences

### ENVS*2210 Apiiculture and Honey Bee Biology F,W (3-0) [0.50]

This course is designed to acquaint the student with the broad field of beekeeping. It will include honey bee biology and behaviour, management for honey production, products of the hive, pests and enemies and the value of bees as pollinators of agricultural crops.

**Offering(s):** Also offered through Distance Education format.

**Department(s):** School of Environmental Sciences

### ENVS*2220 Communications in Environmental Science F,W (4-0) [0.50]

This course provides students with direct training in the academic skills used in researching and communicating environmental science. Within the context of current problems in environmental science, students will develop skills in library research, statistical interpretation, oral and poster presentation and written communication to diverse audiences. Students will research and report on scientific issues within environmental issues being reported in the media.

**Prerequisite(s):** 1 of ENVM*1000 , ENVM*1200 , ENVS*1030

**Restriction(s):** Registration in BBRM, BSC(Env) or BSC(Agr) programs.

**Department(s):** School of Environmental Sciences
**ENVS*2240 Fundamentals of Environmental Geology F (2-3) [0.50]**

This course introduces the concepts and real-world examples of environmental issues related to plate tectonics, natural resources and igneous, metamorphic and sedimentary processes and rocks, groundwater and structural geology. Students will develop laboratory skills in rock and mineral identification, geological map interpretation and site characterization.

**Prerequisite(s):** GEOG*1300

**Restriction(s):** ENVS*1050

**Department(s):** School of Environmental Sciences

**ENVS*2250 Geology of Natural Disasters S/W (3-0) [0.50]**

This course will offer insight into the mechanisms of natural geological disasters and their effects on Planet Earth, human civilization and life in general. Events before, during and after geological disasters such as earthquakes, volcanic eruptions, meteorite impact and climate change will be the focus of this course. This course will not count as a science credit for B.Sc. students.

**Offering(s):** Offered through Distance Education format only.

**Prerequisite(s):** 1 of ENVS*1050 , ENVS*1060, GEOL*1050 , GEOL*1100 , GEOG*1300, GEOG*1350

**Equate(s):** GEOL*2250

**Department(s):** School of Environmental Sciences

**ENVS*2270 Impacts of Climate Change F,W (3-0) [0.50]**

This course will provide students with an overview of recent research into what climate change means for Canada and Canadians. Students will learn about evidence for significant changes to the Boreal forests and about the potential impacts of climate change on human health through increasing heat waves and the heat stress on individuals. The course is intended to bridge the gap between abstract discussion of the climate and understanding what these changes mean at both personal and societal levels.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** Minimum of 4.00 credits

**Restriction(s):** May not be taken by students in the BAS, BBRM, BSC, BSC(Agr) or BSC(Env) programs

**Department(s):** School of Environmental Sciences

**ENVS*2310 Introduction to Biogeochemistry W (4-0) [0.50]**

This course introduces aspects of Earth science that are critical to understanding environmental issues with societal impacts. Students will gain a basic understanding of biogeochemical cycling by exploring how biological processes control element fluxes between water, air, and earth materials. Topics of current interest, such as resource extraction, climate change and geoenvironmenting will be discussed in terms of their contributions to major element cycles. Seminars include quantitative exercises, hands-on exercises, and discussions to complement topics covered in the lectures.

**Prerequisite(s):** CHEM*1040, ENVS*1030

**Department(s):** School of Environmental Sciences

**ENVS*2330 Current Issues in Ecosystem Science and Biodiversity F (4-0) [0.50]**

This course provides an introduction to a range of specific environmental and scientific issues relating to ecological sciences. Issues to be covered include the biology of climate change, forest science and management of terrestrial ecosystems. Three examples of current problems of societal concern will be used as starting points to examine the role of science in addressing them, while developing students' knowledge of the underlying science and its relation to policy and economics.

**Prerequisite(s):** 1 of BIOL*1050, BIOL*1070, ENVM*1000 , ENVM*1200 , ENVS*1030

**Equate(s):** ENVB*2030

**Restriction(s):** ENVB*3330, ENVS*2150

**Department(s):** School of Environmental Sciences

**ENVS*3000 Nature Interpretation F,W (2-3) [0.50]**

This course explores communication and experiential learning theories and their application to natural history interpretation and environmental education program design and delivery. Students will develop interpretive materials, plan an interpretive walk and deliver the interpretive walk to a community group.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** BIOL*2060

**Equate(s):** ENVB*3000

**Department(s):** School of Environmental Sciences

**ENVS*3010 Climate Change Biology S,F (3-0) [0.50]**

This course examines the impacts of climate change on living organisms, biological communities and ecosystems. The course focuses on what is known, and what is not known, about the ways in which the suite of changing climate variables influence biological systems.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** BIOL*2060

**Equate(s):** ENVB*3010

**Department(s):** School of Environmental Sciences

**ENVS*3020 Pesticides and the Environment F,W (3-0) [0.50]**

This course examines the role and use of pesticides by various facets of society and the effect of these pesticides on biological activities in the environment. Preparation of a research proposal is required for the course.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** 1 of BIOL*1040 or (2 of BIOL*1050, BIOL*1070, BIOL*1080, BIOL*1090), CHEM*1040

**Equate(s):** ENVB*3030

**Department(s):** School of Environmental Sciences

**ENVS*3030 Conservation Field Course F (0-6) [0.50]**

This course provides an opportunity for students to practice field skills in natural resource sciences. Topics will include forestry, ecological restoration, stream and wetland conservation, park and trail management, and nature conservation. Use of air photography and related data together with field guides will be emphasized. Guest professionals will assist with instruction on some topics, providing an opportunity for exposure to careers in this field. This course requires participation in a two week field experience held in early May, followed by field work during the summer, and a reflective evaluation in the Fall semester. This course must be recorded as part of your Fall course section and tuition and compulsory fees will be calculated accordingly. There is an extra fee to partially cover field costs.

**Prerequisite(s):** 9.00 credits

**Equate(s):** NRS*3030

**Restriction(s):** Instructor consent required.

**Department(s):** School of Environmental Sciences

**ENVS*3040 Natural Chemicals in the Environment F (3-0) [0.50]**

This course explores the roles of naturally occurring chemicals in the inter-relationships of organisms, and the historical and current uses of natural chemicals by humans for agricultural and medicinal purposes.

**Offering(s):** Offered through Distance Education format only.

**Prerequisite(s):** BIOL*1040 or (2 of BIOL*1050, BIOL*1070, BIOL*1080, BIOL*1090)

**Equate(s):** ENBV*3040

**Department(s):** School of Environmental Sciences

**ENVS*3050 Microclimatology W (3-0) [0.50]**

This course examines natural and intentionally-modified microclimates near the earth's surface; energy budgets; transport of mass and heat. Familiarization with some instruments for micrometeorological measurements will be required.

**Prerequisite(s):** ENVS*2030

**Department(s):** School of Environmental Sciences

**ENVS*3060 Groundwater W (3-0) [0.50]**

This course provides an overview of the physical and chemical processes that operate in the groundwater zone under natural and human-induced conditions. The interrelations between the groundwater regime and the other components of the hydrological cycle are studied. Considerable emphasis is placed on the applied aspects of topics such as exploration, testing and development of aquifers for water supply, the chemical quality of groundwater, and the hydrogeological aspects of waste disposal.

**Prerequisite(s):** ENVS*2030

**Department(s):** School of Environmental Sciences

**ENVS*3080 Soil and Water Conservation F (3-0) [0.50]**

This course examines the processes leading to deterioration of soil and water quality, the impact of deterioration on use, and preventative or corrective measures: soil erosion by water and wind, soil compaction and salinization, drainage channel maintenance, sedimentation and nutrient enrichment of water, conservation programs and policies, and reclamation of severely disturbed soils and saline-sodic soils. Emphasis will be on concepts and solutions to problems in a systems approach.

**Offering(s):** Offered through Distance Education format only.

**Prerequisite(s):** 1 of AGR*2320, ENVS*2060, SOIL*2010

**Equate(s):** BIOL*2060

**Department(s):** School of Environmental Sciences
ENVS*3090 Insect Diversity and Biology W (3-3) [0.50]
This course is an overview of insect diversity and biology emphasizing groups of importance in conservation biology, outdoor recreation and economic entomology. Labs focus on insect identification and the development of a small insect collection.
Prerequisite(s): BIOL*1040 or (2 of BIOL*1050, BIOL*1070, BIOL*1080, BIOL*1090)
Equate(s): ENVB*3090
Department(s): School of Environmental Sciences

ENVS*3100 Internship/Externship in Environmental Sciences S,F,W (0-6) [0.50]
This is a student initiated experiential learning opportunity to be undertaken either on or off campus, and developed in consultation with the Director of the School of Environmental Sciences. Details of the proposed activities will be outlined in a learning contract initiated by the student and agreed by the Director and an appointed project advisor prior to the commencement of the work experience. The supervisor will also provide a description of the project and/or the work experience. This course is intended for experiential learning which does not fit under an academic independent study and which is not part of the co-op work term.
Offering(s): Last offering - Summer 2019
Prerequisite(s): 12.00 credits including (1 of ENVM*1000, ENVM*1200, ENVS*1020, ENVS*1030)
Restriction(s): Director consent required.
Department(s): School of Environmental Sciences

ENVS*3140 Management of Turfgrass Diseases F (2-2) [0.50]
In this course ecology of turfgrass diseases and cultural methods of management will be emphasized, in addition to field recognition and microscopic diagnosis of diseases. Advances in biological and chemical control measures and their impact on turfgrass ecosystems and surrounding environments will also be discussed.
Prerequisite(s): HORT*2450
Equate(s): ENVB*3160
Restriction(s): DTM*3200
Department(s): School of Environmental Sciences

ENVS*3150 Aquatic Systems W (3-2) [0.50]
In this course students will be taught how to apply quantitative methods to the analysis of aquatic systems of the earth from many simultaneous perspectives. The material will include the physical, chemical and biological components of the various liquid surficial structures and processes and also how they interact with humans. The economic, social and policy implications of humans interacting with aquatic systems will also be emphasized. The history of the analysis of aquatic systems will be systematically included in the material.
Prerequisite(s): 10.00 credits including (1 of BIOL*1030, BIOL*1040) or (1 of BIOL*1070, BIOL*1090), CHEM*1040
Restriction(s): BIOL*3450
Department(s): School of Environmental Sciences

ENVS*3180 Sedimentary Environments F (3-3) [0.50]
This course examines the principles of sedimentology and stratigraphy as applied to various ancient and modern sedimentary systems. Students will learn to describe and interpret sedimentary deposits in terrestrial and marine systems as well as the larger forces that control the preservation and evolution of these sedimentary systems over geological time. The course includes several field trips.
Prerequisite(s): ENVS*1050 or ENVS*2240
Restriction(s): ENVS*2400
Department(s): School of Environmental Sciences

ENVS*3210 Plant Pathology F (2-3) [0.50]
This course examines the nature of disease in plants, including their causal agents, etiology, biology, epidemiology, and management. Emphasis is placed on the historical and social importance of plant diseases, and on current issues in plant health. Each student is required to make a collection of 20 plant disease specimens. Students must contact the course instructor before starting their collection.
Prerequisite(s): 1 of BIOL*1040, BIOL*1050, BIOL*1070
Equate(s): ENVB*3210
Department(s): School of Environmental Sciences

ENVS*3220 Terrestrial Chemistry F (4-0) [0.50]
This course surveys the behaviour of elements in the Earth's surface environments, encompassing soils and saturated (wetland, lake, river) sediments. The course is focused on understanding the factors that control the chemical processes governing soils and freshwater sediments through the reactions of the elements and molecules that they contain. Students will extend their fundamental understanding of chemistry to the material of the Earth's upper crust.
Prerequisite(s): CHEM*1050, (1 of ENVS*1050, ENVS*2060, ENVS*2240)
Department(s): School of Environmental Sciences

ENVS*3230 Agroforestry Systems F (2-2) [0.50]
The planned and systematic integration of trees into the agricultural landscape can potentially result in sustainable environmental, ecological, economic and social benefits. The key aspects of deriving these benefits, associated science and management considerations, application potentials at the landscape level and adoption challenges will be discussed. Common temperate and tropical agroforestry systems (e.g. intercropping of trees and crops) will be discussed. Emphasis will be given to successful research and development case studies.
Prerequisite(s): 5.00 credits, (1 of BIOL*1040, BIOL*1050, BIOL*1070)
Equate(s): ENVB*3230
Department(s): School of Environmental Sciences

ENVS*3250 Forest Health and Disease F (2-2) [0.50]
The impact of beneficial and pathogenic microorganisms on forest health, and the biology and management of tree diseases in natural and urban ecosystems is covered in this course. Emphasis will be placed on ecological processes, host-pathogen interactions, mutualistic associations, wood decay, and human impacts on tree health.
Prerequisite(s): 1 of BOT*2100, ENVB*2300, ENVS*2040, ENVS*2330
Equate(s): ENVB*3250
Department(s): School of Environmental Sciences

ENVS*3270 Forest Biodiversity W (4-0) [0.50]
This course examines biodiversity in forest ecosystems at a variety of scales from genes to landscapes. Relationships between biodiversity and forest ecosystem structure, function, and stability are explored. Approaches to conserving biodiversity in managed forests are discussed and evaluated. Analysis of the relevant scientific literature and practical experience with methods of quantifying biodiversity are emphasized in the weekly seminar.
Prerequisite(s): 1 of BIOL*2060, BOT*3050, ENVS*2330
Equate(s): ENVB*3270
Department(s): School of Environmental Sciences

ENVS*3290 Waterborne Disease Ecology F (3-2) [0.50]
This course examines emerging and re-emerging waterborne diseases (bacterial, protozoan, and viral) as a function of environmental change (including chemical and biological pollution and climate change). Waterborne diseases, in freshwater and marine ecosystems, will be examined from historical and contemporary issues as they relate to public and environmental health from regional, national, and international perspectives. Topics presented within the course will include current waterborne diseases of humans and aquatic fauna, detection of waterborne pathogens, microbial evolution, microbial physiology, water regulations and protection of drinking water.
Prerequisite(s): (ENVS*2080 or ENVS*2320 or [MBG*2040, (BIOL*2060 or MICR*2420)])
Department(s): School of Environmental Sciences

ENVS*3300 Introduction to Controlled Environment Systems W (3-0) [0.50]
Canada is among the world's leading providers of research and technology development devoted to "biological life support" for humans on long duration space exploration missions. Students will be exposed to the broad scope of research activities and infrastructure at the UoG's Controlled Environment Systems Research Facility which represents Canada's main contribution to this field internationally. Discussions will focus on the technical challenges faced by space explorers and how the solutions relate to knowledge and technology transfer to Earth-based problems in issues from the environment to the economy. Students will prepare papers and discussions on relevant topics.
Prerequisite(s): BIOL*1070
Department(s): School of Environmental Sciences

ENVS*3310 Soil Biodiversity and Ecosystem Function W (4-0) [0.50]
Soils are the site of complex interactions between minerals, water, air, organic matter and living organisms. This course will focus on the organisms that live in the soil and their activities in soil ecosystems, soil as a habitat for organisms, the key role of microorganisms in nutrient cycles and plant-microbe relationships and will review basic soil microbial and ecological principles.
Prerequisite(s): 10.00 credits including (1 of AGR*2320, ENVS*2060, SOIL*2100)
Equate(s): ENVS*3310, SOIL*3300
Department(s): School of Environmental Sciences
ENVS*3340 Use and Management of Environmental Data F (2-3) [0.50]
This course is focused on finding, collecting and interpreting data of the physical environment. Students will access various online databases, such as meteorological and hydrological time series, and perform and interpret statistical analysis with the data. Issues around calibration and data collection will be explored by performing calibrations and experiments. Students will make a numerical simulation of a dynamic environmental phenomenon. Students will learn to build and query a relational database with both qualitative and quantitative data.
Prerequisite(s): 1 of GEOG*2460, STAT*2040, STAT*2060
Restriction(s): ENVS*4110
Department(s): School of Environmental Sciences

ENVS*3370 Terrestrial Ecosystem Ecology W (3-0) [0.50]
In this course, the ecosystem is the biological level of organization of interest. Living organisms and their physical environment are considered as components of an integrated system. Key ecosystem processes such as energy flow, carbon and nutrient cycling, and succession, and the controls on these processes, are examined. The impacts of human activity and global change on ecosystem structure and function are investigated.
Prerequisite(s): BIOL*2600 or ENVS*2330
Department(s): School of Environmental Sciences

ENVS*3410 Independent Research I S,F,W (0-6) [0.50]
In this course the student will undertake an independent research project of a practical or theoretical nature that relates to environmental sciences and is conducted under the supervision of a faculty member. This course introduces third year students to independent research. Projects may be designed to be completed in a single semester, or they may be designed to be completed over two semesters, in conjunction with ENVS*3420. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A School registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Offering(s): Last offering - Summer 2019
Prerequisite(s): Minimum of 10.00 credits. Minimum cumulative average of 70%. 
Restriction(s): Envs*3430 Instructor consent required. Restricted to students in BBRM.EM, BSC(Env), BSC(Agr) or BSC(Env).
Department(s): School of Environmental Sciences

ENVS*3420 Independent Research II S,F,W (0-6) [0.50]
In this course the student will undertake an independent research project of a practical or theoretical nature that relates to environmental sciences and is conducted under the supervision of a faculty member. This course introduces third year students to independent research. Projects may be a continuation of research conducted in ENVS*3410, or they may be on a separate research topic. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A School registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Offering(s): Last offering - Summer 2019
Prerequisite(s): Envs*3410. Minimum of 10.00 credits. Minimum cumulative average of 70%.
Restriction(s): Envs*3430 Instructor consent required. Registration in BBRM.EM, BSC(Env), BSC(Agr) or BSC(Env).
Department(s): School of Environmental Sciences

ENVS*3430 Independent Research I S,F,W (0-12) [1.00]
In this course the student will undertake an independent research project of a practical or theoretical nature that relates to environmental sciences and is conducted under the supervision of a faculty member. This course introduces third year students to independent research. Projects may be a continuation of research conducted in ENVS*3410, or they may be on a separate research topic. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A school registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Offering(s): Last offering - Summer 2019
Prerequisite(s): Envs*3410. Minimum of 10.00 credits. Minimum cumulative average of 70%.
Restriction(s): Envs*3430 Instructor consent required. Registration in BBRM.EM, BSC(Env), BSC(Agr) or BSC(Env).
Department(s): School of Environmental Sciences

ENVS*3430 Independent Research II S,F,W (0-12) [1.00]
In this course the student will undertake an independent research project of a practical or theoretical nature that relates to environmental sciences and is conducted under the supervision of a faculty member. This course introduces third year students to independent research. Projects may be a continuation of research conducted in ENVS*3410, or they may be on a separate research topic. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A School registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Offering(s): Last offering - Summer 2019
Prerequisite(s): Envs*3410. Minimum of 10.00 credits. Minimum cumulative average of 70%.
Restriction(s): Envs*3430 Instructor consent required. Registration in BBRM.EM, BSC(Env), BSC(Agr) or BSC(Env).
Department(s): School of Environmental Sciences

ENVS*3510 Independent Study I S,F,W (0-6) [0.50]
This course introduces students to independent research and study. Students will undertake a project based on research in the literature that relates to environmental sciences. Projects may be a continuation of research conducted in ENVS*3510, or they may be on a separate research topic. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A School registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Offering(s): Last offering - Summer 2019
Prerequisite(s): Envs*3510. Minimum cumulative average of 70%.
Restriction(s): Envs*3530 Instructor consent required. Restricted to students in BBRM.EM, BSC(Env), BSC(Agr) or BSC(Env).
Department(s): School of Environmental Sciences

ENVS*3520 Independent Study II S,F,W (0-6) [0.50]
This course introduces students to independent research and study. Students will undertake a project based on research in the literature that relates to environmental sciences. Projects may be a continuation of research conducted in ENVS*3510, or they may be on a separate research topic. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A School registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Offering(s): Last offering - Summer 2019
Prerequisite(s): Envs*3510. Minimum cumulative average of 70%.
Restriction(s): Envs*3530 Instructor consent required. Restricted to students in BBRM.EM, BSC(Env), BSC(Agr) or BSC(Env).
Department(s): School of Environmental Sciences

ENVS*4011/2 Project in Environmental Sciences F,W (3-0) [0.50]
This course introduces students to independent research and study. Students will undertake a project based on research in the literature that relates to environmental sciences. Projects may be a continuation of research conducted in ENVS*3510, or they may be on a separate research topic. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A School registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Offering(s): Last offering - Summer 2019
Prerequisite(s): Envs*3510. Minimum cumulative average of 70%.
Restriction(s): Envs*3530 Instructor consent required. Restricted to students in BBRM.EM, BSC(Env), BSC(Agr) or BSC(Env).
Department(s): School of Environmental Sciences

ENVS*4000 Toxicological Risk Assessment W (3-0) [0.50]
This advanced course will give students a working knowledge of current processes and techniques for toxicological risk characterization. The course material will cover problem definition, effect characterization, exposure characterization, risk assessment and risk management decision making.
Prerequisite(s): TOX*2000
Department(s): School of Environmental Sciences

ENVS*4001 Project in Environmental Sciences F (3-0) [0.50]
First part of the two-semester course ENVS*4001/2. Refer to ENVS*4001/2 for course description.
Equate(s): ENVS*4001
Restriction(s): 12.00 credits, Registration in the BSC(Env) program.
Department(s): School of Environmental Sciences

ENVS*4002 Project in Environmental Sciences W (3-0) [0.50]
This is the second part of the two-semester course ENVS*4001/2. Refer to ENVS*4001/2 for course description.
Prerequisite(s): ENVS*4001
Equate(s): ENVS*4002
Department(s): School of Environmental Sciences

ENVS*4004/1 Project in Environmental Sciences F-W (3-0) [1.00]
The course permits the student the opportunity to integrate both the skills and knowledge acquired in earlier courses through application to current environmental problems and issues. Group research problems and exposure to critical environmental policy issues will form the core elements of the course. This is a two-semester course offered over consecutive semesters. When you select it you must select ENVS*4001 in the Fall semester and ENVS*4002 in the Winter semester. A grade will not be assigned to ENVS*4001 until ENVS*4002 is completed.
Equate(s): ENVS*4001/2
Restriction(s): 12.00 credits, Registration in the BSC(Env) program.
Department(s): School of Environmental Sciences

ENVS*4005 Project in Environmental Sciences W (3-0) [0.50]
ENVS*4030 Ecological Hydrology W (3-0) [0.50]
This course introduces the emerging discipline of ecological hydrology, which focuses on interactions and feedbacks between the elements of the water cycle, ecosystems and organisms. The emphasis will be on how hydrological processes regulate ecological ones but also on the mechanisms of ecological regulation of hydrological processes – which are often ignored in traditional hydrological investigations. Students will learn about complex dynamics prevailing in ecological hydrological systems using a blend of theory, quantitative tools and case studies. Students will also learn to synthesize recent literature, collect and analyze relevant data from open-access databases, and perform holistic ecological hydrological system analysis through a term project.
Prerequisite(s): (BIOL*3130 or GEOG*3610), (1 of GEOG*2460, STAT*2040, STAT*2060, STAT*2120, STAT*2230)
Department(s): School of Environmental Sciences

ENVS*4070 Pollinator Conservation W (3-0) [0.50]
This course will explore the ecology of pollination with an emphasis on the roles animals play in pollen movement. Students will critically examine hypothesized drivers of regional, national and global pollinator declines, and the range of potential strategies suggested to mitigate or reverse these declines. Students will examine the efficacy of a wide range of pollinator conservation strategies in different geographical, ecological and economic contexts to help them build an understanding of the available toolbox for conservation.
Prerequisite(s): BIOL*3130
Department(s): School of Environmental Sciences

ENVS*4090 Soil Management F (3-1) [0.50]
A lecture-tutorial course on the practical aspects of soil management for crop production as they relate to the physical, chemical and biological properties of soils; major emphasis is placed on soil fertility as related to field soil properties and fertilizer, lime and manure use, soil and plant testing for mineral nutrients. The beneficial aspects of drainage, irrigation, erosion control and related tillage practices on soil fertility are also presented. Due regard is given to both economic and environmental aspects of soil management practices.
Prerequisite(s): 1 of AGR*2301/2, AGR*2320, ENVS*2060, SOIL*2010
Equate(s): SOIL*4090
Department(s): School of Environmental Sciences

ENVS*4100 Integrated Management of Invasive Insect Pests W (3-3) [0.50]
This course explores the concept of integrated pest management as it applies to the mitigation of invasive pest insects associated with agricultural and forest ecosystems.
Prerequisite(s): 1 of CROP*3300, CROP*3310, ENVB*2040, ENVB*2060, HORT*3280, HORT*3350, HORT*3350
Equate(s): ENVB*4100
Department(s): School of Environmental Sciences

ENVS*4160 Soil and Nutrient Management F (4-3) [0.50]
This course consists of the same lectures and seminars as (ENVS*4090 or SOIL*4090), but with an additional laboratory. The laboratory portion will focus on the regulatory requirements as stated under the Nutrient Management Act, 2001. Students will discuss nutrient management issues and gain practical experience using the NMAN software program.
Prerequisite(s): 1 of AGR*2301/2, AGR*2320, ENVS*2060, SOIL*2010
Equate(s): SOIL*4130
Restriction(s): ENVY*1070, ENVY*4090 or SOIL*4090
Department(s): School of Environmental Sciences

ENVS*4180 Insecticide Biological Activity and Resistance W (4-0) [0.50]
This course explores the diverse modes of action of botanical, microbial and synthetic insecticides. Detoxification mechanisms, selectivity, resistance management and the process of pesticide discovery and development are also considered. The course includes a review of insect physiological systems and discussion of the stability and distribution of pesticides in the environment.
Offering(s): Offered in even-numbered years.
Prerequisite(s): Minimum of 12.00 credits
Restriction(s): ENVB*4240, Registration in the BAS, BBRM, BSC, BSC(Agr) or BSC(Env) program
Department(s): School of Environmental Sciences

ENVS*4190 Biological Activity of Herbicides W (3-0) [0.50]
This course explores the diverse modes of action of botanical, microbial and synthetic herbicides. Detoxification mechanisms, selectivity, resistance management and the process of herbicide discovery and development are also considered. The course includes a review of plant physiological systems and discussion of the stability and distribution of herbicides in the environment.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): Minimum of 12.00 credits
Restriction(s): ENVB*4240, Registration in the BAS, BBRM, BSC, BSC(Agr) or BSC(Env) program
Department(s): Department of Plant Agriculture

ENVS*4210 Meteorological and Environmental Instrumentation W (3-0) [0.50]
This course covers the design and implementation of measurement systems for atmospheric and environmental studies. Principles of operation and practical consideration of various meteorological and soil sensors will be discussed along with overall design and implementation procedures for environmental monitoring. Students will propose and perform a small independent experiment or field measurement of their own design.
Prerequisite(s): 1 of ENVS*3050, ENVS*3130, ENVS*3340, PHYS*3100
Equate(s): MET*4210
Department(s): School of Environmental Sciences

ENVS*4230 Biology of Aquatic Insects F (2-3) [0.50]
This course is a study of the adult and immature forms of aquatic insects. Students are required to present a collection of at least 200 insect specimens identified to genus.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): ENVB*3090 or ENVS*3090
Equate(s): ENVB*4220
Department(s): School of Environmental Sciences

ENVS*4260 Field Entomology FW (1-6) [0.50]
This course is taught in late April or May. Students may enroll in either the preceding Winter semester or following Fall semester. The course provides an introduction to insect sampling, observation, identification, and experimentation in field settings. Student activities are divided equally between observing, collecting and identifying specimens from more than 20 families and an experimental component involving one or more studies to test hypotheses about the ecology or behaviour of insects. There are occasional lectures and discussions to highlight particularly interesting observations of insects. Student evaluation is based on the student's insect collection and associated labbook, a written paper describing their experiment, contributions to class discussions and activities, and peer evaluation. The field site is generally in the USA or South America. Course fees cover costs of room, board, supplies, and transportation to the field site(s). This course must be recorded as part of the student's Fall or Winter course selection and tuition and compulsory fees will be calculated accordingly. Detailed information is available from the Office of the Director - School of Environmental Sciences.
Prerequisite(s): (ENVB*3090 or ENVS*3090) or (ENVB*4040 or ENVS*4040)
Equate(s): ENVB*4260
Restriction(s): Instructor consent required.
Department(s): School of Environmental Sciences

ENVS*4320 Laboratory and Field Methods in Soil Biodiversity W (1-3) [1.00]
This course will use a hands-on approach to investigate concepts and develop skills needed for understanding key soil functions. Emphasis will be on the transformation of nutrients and contaminants in soils and groundwater by microorganisms. Approaches for analyzing microbial populations and activities in the environment, including molecular techniques will be covered.
Prerequisite(s): ENVS*3200 or ENVS*3310
Department(s): School of Environmental Sciences

ENVS*4350 Forest Ecology F (3-3) [0.50]
This course will explore aspects of forest ecology with an emphasis on the ecological principles needed for sound forest management. Biotic and abiotic components of forest ecosystems will be discussed in the context of energy flow, nutrient cycling, forest succession and appropriate silvicultural systems.
Prerequisite(s): (BIOL*2060 or ENVS*2330
Equate(s): ENVB*4780
Department(s): School of Environmental Sciences
ENVS*4360 Glacial Environments W (4-0) [0.50]
This course will explore modern to ancient glacial environments, focusing on the sedimentary record they leave behind and applications of glacial geology including reconstructing past environments, examining how glacial deposits affect the distribution of resources or groundwater contaminants, and discovering the response of glaciers to recent and past climate change. Students will develop skills in critically evaluating literature and geological data, description and identification of glacial deposits.
Prerequisite(s): ENVS*2400 or ENVS*3180
Department(s): School of Environmental Sciences

ENVS*4370 Environmental Organic Chemistry W (3-0) [0.50]
This course discusses the chemical processes that influence organic compounds in the environment, including both anthropogenic organic compounds, such as pollutants and pesticides, and natural organic matter, such as humic materials and biomolecules. Topics include: the occurrence of organic contamination in the environment, emerging classes of organic contaminants, the relationship between molecular structure and environmental fate, persistent organic pollutants, the transformation of organic molecules in the environment, and the origins and functionality of natural organic matter in terrestrial and aquatic environments.
Prerequisite(s): ENVS*3220
Department(s): School of Environmental Sciences

ENVS*4390 Soil Variability and Land Evaluation F (3-2) [1.00]
This course integrates formal in-field (including a two-day camp & excursions during orientation week) and laboratory training, with classroom discussions of concepts, to guide independent group projects on the gathering and interpreting of soilscape information. The principal focus is on soil, as a spatially- and temporally-variable product and component of ecosystems; special consideration is given to the factors controlling soil processes, from local to global scales. An examination of methods, for describing and quantifying the distribution of soils, includes survey and sensor-based techniques, in conjunction with data trend analysis and modelling. Students are required to notify the instructor in the preceding Winter semester of their intention to participate.
Prerequisite(s): 15.00 credits including (1 of AGR*2320, ENVS*2060, ENVS*2310, ENVS*2340, SOIL*2010)
Restriction(s): ENVS*3120, ENVS*4150, ENVS*4250, SOIL*4250
Department(s): School of Environmental Sciences

ENVS*4410 Introduction to Advanced Independent Research S,F,W (1-0) [0.50]
In this course the student will undertake an independent research project of a practical or theoretical nature that relates to environmental sciences and is conducted under the supervision of a faculty member. This course is designed to provide senior undergraduate students with an introduction to independent research work. The course includes work with a faculty advisor to develop a research project, formulate hypotheses/objectives, design and conduct preliminary experiments to test the hypotheses. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A school registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Prerequisite(s): Minimum of 10.00 credits. Minimum cumulative average of 70%.
Restriction(s): Registration in BSC(Env), BSC(Agr), BSCH or BBRM. Instructor consent required.
Department(s): School of Environmental Sciences

ENVS*4420 Advanced Independent Research S,F,W (1-0) [0.50]
In this course the student will undertake an independent research project of a practical or theoretical nature that relates to environmental sciences and is conducted under the supervision of a faculty member. This course is designed to provide a research intensive experience. This course is designed to be the completion of the research proposal developed in ENVS*4410. In this course the student will undertake an independent research project of a practical or theoretical nature that relates to environmental sciences and is conducted under the supervision of a faculty member. This course is designed to provide a research intensive experience. This course is designed to be the completion of the research proposal developed in which the course is taken.
Prerequisite(s): ENVS*4410. Minimum cumulative average of 70%.
Restriction(s): ENVS*4430. Registration in BSC(Env), BSC(Agr), BSCH or BBRM. Instructor consent required.
Department(s): School of Environmental Sciences

ENVS*4430 Advanced Independent Research S,F,W (0-12) [1.00]
In this course the student will undertake an independent research project of a practical or theoretical nature that relates to environmental sciences and is conducted under the supervision of a faculty member. This course is designed to be the completion of the research proposal developed in ENVS*4410 by the student in consultation with a faculty advisor. This course can be selected in place of ENVS*4420 if the student and faculty advisor deem the project to be of sufficient scope to necessitate a 1.00 credit course. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A school registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Prerequisite(s): ENVS*4410. Minimum cumulative average of 70%.
Restriction(s): ENVS*4420. Registration in BSC(Env), BSC(Agr), BSCH or BBRM. Instructor consent required.
Department(s): School of Environmental Sciences

ENVS*4510 Introduction to Advanced Independent Study S,F,W (1-0) [0.50]
This course provides an opportunity for students to engage in advanced independent research and study. Students will undertake a project based on research in the literature that relates to environmental sciences. Projects will be designed to be completed in a single semester. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A school registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Prerequisite(s): Minimum of 10.00 credits. Minimum cumulative average of 70%.
Restriction(s): Restricted to students in the BBRM.EM, BSCH, BSC(Agr), BSC(Env). Instructor consent required.
Department(s): School of Environmental Sciences

ENVS*4520 Advanced Independent Study II S,F,W (0-6) [0.50]
This course provides an opportunity for students to engage in advanced independent research and study. Students will undertake a project based on research in the literature that relates to environmental sciences. Projects may be a continuation of research conducted in ENVS*4510, or they may be on a separate research topic. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A school registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Offerings(s): Last offering - Summer 2019
Prerequisite(s): ENVS*4510. Minimum of 14.00 credits. Minimum cumulative average of 70%.
Restriction(s): Restricted to students in the BBRM.EM, BSCH, BSC(Agr), BSC(Env). Instructor consent required.
Department(s): School of Environmental Sciences

ENVS*4530 Advanced Independent Study S,F,W (0-12) [1.00]
This course provides an opportunity for students to engage in advanced independent research and study. Students will undertake a project based on research in the literature that relates to environmental sciences. This project course is designed to provide an intensive study experience that is completed in a single semester. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A school registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the course is taken.
Offerings(s): Last offering - Summer 2019
Prerequisite(s): (1 of ENVS*3510, ENVS*3520, ENVS*3530). Minimum of 14.00 credits. Minimum cumulative average of 70%.
Restriction(s): ENVS*4510, ENVS*4520. Restricted to students in the BBRM.EM, BSCH, BSC(Agr), BSC(Env). Instructor consent required.
Department(s): School of Environmental Sciences
Equine
Ontario Agricultural College, Department of Animal Biosciences

**EQN*1010 Introduction to Equine Management F (2-6) [1.00]**

This course provides the basis for understanding the equine industry, both from a practical and a theoretical perspective. Students will participate in daily routine care and management procedures, and learn basic techniques such as horse handling, grooming, bandaging, blanketting, tack, tractor driving and fire safety. Horse-environment interactions will focus on equine behaviour. The relationship of horses with humans will be explored from ancient through to modern times, including breeding for specific equestrian sports, prominent horsemen/women, and the variety of career options. Current issues will be explored including economic status and hot topics in the industry. Students may expect early morning and some weekend assignments. Students must provide their own grooming kit.

**Restriction(s):** ENVM*1090, EQN*1020, EQN*1030, EQN*1100 Registration in BBRM.EQM

**Department(s):** Department of Animal Biosciences

**EQN*2040 Equine Anatomy and Physiology W (3-3) [0.50]**

This course examines the gross anatomy and physiology of the horse. All the major body organs will be studied in relation to their function in the equine. Comparative analysis will be made to other domestic farm animals.

**Prerequisite(s):** BIOL*1050

**Restriction(s):** Registration in BBRM.EQM

**Department(s):** Department of Animal Biosciences

**EQN*2050 Introduction to Equine Nutrition W (3-3) [0.50]**

This course introduces fundamental concepts of nutrition from a biochemical perspective. The biological roles of carbohydrates, lipids and proteins are studied, as well as the role of metabolic pathways in maintaining equine health at the cellular, organ, and whole body levels. Diagnosis, management, and prevention of equine nutritional diseases are discussed.

**Prerequisite(s):** BIOL*1050

**Restriction(s):** Registration in BBRM.EQM

**Department(s):** Department of Animal Biosciences

**EQN*2060 Equine Event Management I F (1-3) [0.50]**

This course will introduce skills required to organize equine events, such as horse shows and clinics. Major topics include event planning, and managing event staff and volunteers. Required activities outside of regularly scheduled class hours will be assigned. Students will assist in the planning and staging of equine events either on or off campus.

**Prerequisite(s):** EQN*1010

**Restriction(s):** EQN*1060 Registration in BBRM.EQM

**Department(s):** Department of Animal Biosciences

**EQN*2070 Equine Event Management II W (1-3) [0.50]**

This course will further develop the skills required to organize equine events, such as horse shows and clinics. Major topics include regional impact, marketing and budgeting. Required activities outside of regularly scheduled class hours will be assigned. Students will assist in the planning and staging of equine events either on or off campus.

**Prerequisite(s):** EQN*2060

**Restriction(s):** EQN*1070 Registration in BBRM.EQM

**Department(s):** Department of Animal Biosciences

**EQN*2150 Equine Facility Management and Design W (3-2) [0.50]**

This course introduces students to the design, development and management of an equine facility. Aspects of the building, renovating and management of horse facilities including site planning and interior design are presented. Special consideration is given to environmental control, waste management and environmental stewardship. Management topics include theoretical and practical skills, interacting with people, recruiting, supervising, motivating, training employees, effective listening, dealing with difficult people, group dynamics and leadership.

**Restriction(s):** AGR*2100, EQN*1050, EQN*2020 Registration in BBRM.EQM

**Department(s):** Department of Animal Biosciences

**EQN*2200 Equine Industry Trends and Issues I F (3-0) [0.50]**

This course discusses selected current global, national and regional issues in the horse industry. Analysis of strengths, weaknesses, opportunities and threats are applied to controversial issues in classroom discussions and reflective critical thinking.

**Prerequisite(s):** EQN*1010

**Restriction(s):** Registration in BBRM.EQM

**Department(s):** Department of Animal Biosciences

**EQN*2500 Equine Field Course F (0-4) [0.50]**

In this 10-day field course, students will tour a selected area, visiting premier equine educational and industry locations managed by elite professionals. Students are exposed to a broad, high caliber learning experience from a variety of industry operations, providing a catalyst for future courses in the BBRM degree program. An additional fee will be assessed per student to cover the cost of transportation and accommodation. This course must be recorded as part of your Fall course selection and tuition and compulsory fees will be calculated accordingly. Contact course instructor during the preceding March course selection period.

**Prerequisite(s):** EQN*1050 or EQN*2150

**Restriction(s):** Registration in BBRM.EQM. Instructor consent required.

**Department(s):** Department of Animal Biosciences

**EQN*3050 Equine Exercise Physiology W (3-0) [0.50]**

This course considers the conversion of absorbed nutrients into metabolic fuels and the use of these substrates for work and heat production in horses. This knowledge is used as a basis for the understanding of the training and performance of horses used for competitive purposes.

**Prerequisite(s):** ANSC*3080 or EQN*2040, EQN*2050

**Department(s):** Department of Animal Biosciences

**EQN*3060 Equine Reproduction W (3-3) [0.50]**

Students will develop a solid foundation in reproductive endocrinology and physiology in the stallion and the mare, emphasis on physiology, breeding management and recognition of common reproductive problems in stallion, mare or foal. Practical experience includes dissection of reproductive tracts, semen collection and evaluation.

**Prerequisite(s):** BIOL*1090, EQN*2040

**Restriction(s):** Registration in BBRM.EQM

**Department(s):** Department of Animal Biosciences

**EQN*3070 Equine Health Management F (3-3) [0.50]**

This course asks the equine student to apply principles of management to knowledge of the equine industry, equine facility design, biological systems and equine anatomy and physiology. The role of management in the optimization of the health of the horse is critical to success in the industry. Fundamental principles of horse health will be introduced including important indicators of individual and herd health, record keeping and the role of management in disease causation. Application of current, scientifically based management principles and techniques will ask the student to develop both proactive and reactive decision making skills in the context of equine health management.

**Prerequisite(s):** EQN*2040

**Restriction(s):** Registration in BBRM.EQM

**Department(s):** Department of Animal Biosciences

**EQN*3150 Equine Exercise Physiology Laboratory W (0-3) [0.50]**

This course is an additional laboratory component to complement EQN*3050. Lab exercises focus on the practical application of theoretical knowledge to develop an understanding for the basic physiological principles of muscle contraction and fatigue, thermoregulation, energy utilization under differing exercise intensities, and how these principles can be applied to differential training strategies for equine athletes.

**Prerequisite(s):** ANSC*3080, EQN*2040, EQN*2050

**Co-requisite(s):** EQN*3050

**Restriction(s):** Registration in BBRM.EQM

**Department(s):** Department of Animal Biosciences

**EQN*4020 Advanced Equine Nutrition W (3-0) [0.50]**

This course focuses on the nutrition of horses at peak levels of performance or endurance. The use of real-world, case-study scenarios allows for the evaluation of practical feeding programs across a range of equine performance situations.

**Prerequisite(s):** EQN*2050 or NUTR*3210

**Department(s):** Department of Animal Biosciences

**EQN*4400 Equine Industry Trends and Issues II F (3-0) [0.50]**

This seminar course integrates discussion on selected current global, national and regional issues in the equine industry, building upon knowledge gained in earlier courses. Current issues in the equine industry will be examined through debate and discussion.

**Prerequisite(s):** 12.50 credits including EQN*2200

**Restriction(s):** Registration in BBRM.EQM

**Department(s):** Department of Animal Biosciences
### EQN*4500 Equine Integrated Project F (0-6) [1.00]

This course facilitates education, communication and an exchange of ideas between students and equine businesses to enhance the development of the equine industry and its leaders. Student teams work together with an existing equine enterprise to develop and carry out a hands-on research project that is of benefit to the business owner. Students apply the knowledge gained in preceding courses in a holistic approach to the project as a culmination of their learning.

**Prerequisite(s):** 15.00 credits  
**Restriction(s):** EQN*3500, Registration in BBRM.EQM  
**Department(s):** Department of Animal Biosciences
## European Studies

**School of Languages and Literatures**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EURO*1100</strong></td>
<td>European Cinema F (4-0) [0.50]</td>
<td>10.00 credits including (EURO<em>1100 or EURO</em>1200), EURO*2200, 2.00 credits</td>
<td>Approval of the Coordinator for the European Studies Program.</td>
<td>7.50 credits</td>
<td>EURO<em>2300, EURO</em>3000, EURO*3300</td>
</tr>
<tr>
<td><strong>EURO*2200</strong></td>
<td>Towards European Modernism W (3-0) [0.50]</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
<td>2.00 credits</td>
</tr>
<tr>
<td><strong>EURO*3000</strong></td>
<td>Revolution and the Fantastic in European Culture W (3-0) [0.50]</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
<td>7.50 credits</td>
</tr>
<tr>
<td><strong>EURO*3300</strong></td>
<td>Violence and Culture F (3-0) [0.50]</td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
<td>7.50 credits</td>
</tr>
<tr>
<td><strong>EURO*3700</strong></td>
<td>Experiential Learning and Language S,F,W (0-0) [0.50]</td>
<td>10.00 credits including 1.50 credits in European Studies. The topics to be discussed in the course will centre on major movements in European cinema, such as Italian Neo-Realism and the French New Wave, film genre, the representation of gender, national and ethnic identity, European versus Hollywood filmmaking, national and transnational cinema.</td>
<td>A seminar course designed to explore one or more topics of European culture, history and/or business, depending on the expertise of the instructor. Students should consult the Coordinator of European Studies for specific offerings.</td>
<td>7.50 credits</td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td><strong>EURO*4050</strong></td>
<td>Contemporary Europe. New Landscapes in the Post-Cold War Era F (3-0) [0.50]</td>
<td>10.00 credits</td>
<td></td>
<td>School of Languages and Literatures</td>
<td></td>
</tr>
<tr>
<td><strong>EURO*4740</strong></td>
<td>Research Project in European Studies F,W (3-0) [0.50]</td>
<td>An independent study course that requires a research project on an aspect of European Studies. The topic must be approved by the Coordinator of the European Studies Program. Research is undertaken with the guidance of a faculty advisor, and seminar presentations will be included. A final research paper must be written in the student's chosen core language.</td>
<td>10.00 credits including (EURO<em>1100 or EURO</em>1200), EURO<em>2200, EURO</em>3000, EURO*3300</td>
<td>Approval of the Coordinator for the European Studies Program.</td>
<td>School of Languages and Literatures</td>
</tr>
</tbody>
</table>
### External Courses

All courses labeled XSEN*XXXX are Seneca College Courses. The corresponding Seneca course numbers are provided. Detailed course profiles can be accessed through the Seneca College home page at http://www.senecac.on.ca/. All XSEN*XXXX courses are limited to students B.Sc. Biological and Pharmaceutical Chemistry.

#### XSEN*3030 Pharmacology and Applied Toxicology W (3-3) [0.50]

This subject is an introduction to the general aspects of pharmacology and toxicology. The lecture topics will cover the pharmacological activity of drugs on the autonomic nervous system, central nervous system and the cardiovascular system. The laboratory practicals will focus on testing, drug screening, and clinical trial methodology. This course is taught at Seneca College.

**Prerequisite(s):** BIOC*2580, CHEM*2400  
**Restriction(s):** Restricted to BSCH.BPCH and BSCH.BPCH:C  
**External Course Code(s):** Seneca #PHT-533  
**Department(s):** Department of Chemistry

#### XSEN*3040 Occupational Health and Chemistry W (2-3) [0.50]

A general coverage of general aspects of industrial hygiene. Specific topics include Canadian legislation with respect to Occupational Safety, modes of evaluation of chemical exposure, occupational toxicology, and instrumentation associated with the evaluation of the occupational environment. This course is taught at Seneca College.

**Prerequisite(s):** CHEM*2700  
**Restriction(s):** Restricted to BSCH.BPCH and BSCH.BPCH:C  
**External Course Code(s):** Seneca #OCC-433  
**Department(s):** Department of Chemistry

#### XSEN*3060 Pharmaceutical Analysis - Advanced W (2-3) [0.50]

This course reinforces the concept of how the pharmaceutical laboratory works by focusing on method validation requirements within the pharmaceutical industry. It introduces students to the regulatory (ICH, FDA) requirements and guidelines for systems validation, including TPP-acceptable methods and GMP regulations. Validation methods that are taught include Related Substances, Assay, Dissolution and Cleaning. Critical validation parameters (e.g., linearity, specificity, limit of quantitation, etc.) are focused on as well as validation protocols including establishing specifications and dealing with exceptions or out-of-specification (OOS) results. Process validation characteristics (i.e., Design Qualification (DQ), Installation Qualification (IQ), Operation Qualification (OQ), Performance Qualification(PQ) or System Suitability) are also emphasized as well as “Best Practices” such as Process Capabilities and Annual Product Review. This course is taught at Seneca College.

**Prerequisite(s):** BIOC*2580, CHEM*2400  
**Restriction(s):** Restricted to BSCH.BPCH and BSCH.BPCH:C  
**External Course Code(s):** Seneca #PHA-533  
**Department(s):** Department of Chemistry

#### XSEN*3070 Pharmaceutical Product Formulations W (2-3) [0.50]

This subject deals with the theoretical and practical aspects of pharmaceutical product formulation with an emphasis on semi-solid and liquid formulations. The students prepare and test ointments, creams, lotions, and syrups in the laboratory. Formulation as it relates to overall product stability and efficacy is also covered in both theoretical and practical terms. This course is taught at Seneca College.

**Prerequisite(s):** CHEM*3750  
**Restriction(s):** XSEN*4020 , Restricted to BSCH.BPCH and BSCH.BPCH:C  
**External Course Code(s):** Seneca #PAC-633  
**Department(s):** Department of Chemistry

#### XSEN*3200 Pharmaceutical Organic Chemistry W (1-3) [0.50]

The determination of the structure of organic compounds using spectroscopic methods such as N.M.R. and mass spectroscopy are discussed. Correlation of structure and reactivity (i.e. drug activity) of organic compounds is also explored. A multi-step synthesis of an anesthetic (lidocaine) and mass-spectrometric analysis of an unknown organic compound (or mixture) are examples of lab-projects. This course is taught at Seneca College.

**Prerequisite(s):** CHEM*2700  
**Restriction(s):** Restricted to BSCH.BPCH and BSCH.BPCH:C  
**External Course Code(s):** Seneca #IPM-472  
**Department(s):** Department of Chemistry

#### XSEN*3210 Introduction to Pharmaceutical Manufacturing W (2-3) [0.50]

This laboratory oriented course is intended to introduce students to the world of pharmaceutical analysis and manufacturing. Certain select physical and chemical techniques used in the control of raw materials and finished dosage forms are emphasized. Topics will include the methods and equipment required to produce solid dosages.

**Prerequisite(s):** CHEM*2700  
**Restriction(s):** Restricted to BSCH.BPCH and BSCH.BPCH:C  
**External Course Code(s):** Seneca #PPF-633  
**Department(s):** Department of Chemistry

---

**Last Revision: July 4, 2019**
### Financial

**Department of Management**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN*3100</td>
<td>Corporate Finance F,W</td>
<td>(3-0) [0.50]</td>
<td>This is a course on the theory and practice of corporate finance. The course provides a framework for analyzing the main financial decisions of a corporation. Emphasis is placed on the application of corporate finance theory to real-world cases. The topics covered in this course include firm valuation, capital budgeting, cost of capital, capital structure, dividend policy, initial public offerings, and may include mergers and acquisitions.</td>
</tr>
</tbody>
</table>

**Prerequisite(s):** ECON*2560 or FIN*2000

**Restriction(s):** This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

**Department(s):** Department of Economics and Finance
Family Relations and Human Development

Department of Family Relations and Applied Nutrition.

These courses support two majors offered by the Department of Family Relations and Applied Nutrition: Adult Development, and Child, Youth and Family.

FRHD*1010 Human Development W (3-0) [0.50]
This course is an introduction to the study of the development of the individual throughout the life cycle. Emphasis will be placed on the interrelationships between physiological, sociological and psychological aspects of normal human development.

Offering(s): Also offered through Distance Education format.
Restriction(s): Not available to Child, Youth & Family or Child, Youth & Family Co-op majors. This is a Priority Access course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*1020 Couple and Family Relationships W (3-0) [0.50]
A survey of family dynamics throughout the life course, emphasizing themes of power, intimacy and family diversity. Topics may include: gender socialization, sexuality, mate selection, communication, abuse, couple interaction, parent-child relations, divorce, remarriage.

Offering(s): Also offered through Distance Education format.
Equate(s): FRHD*2010
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*1100 Life: Health and Well-Being F (3-0) [0.50]
This course integrates the theory, application and research of various aspects of health-related topics across the lifespan, emphasizing relevance to the lives of young adults

Offering(s): Also offered through Distance Education format.
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*2040 Principles of Program Design for Children W (3-0) [0.50]
This course will examine the elements involved in planning and implementing quality play-based programs for young children. Some of the issues include: the role of the teacher, meeting developmental needs, the materials and the organization of the environment, and instructional strategies. The course will involve a workshop component.

Prerequisite(s): FRHD*2270 or PSYC*2450
Restriction(s): Restricted to students in B.A.Sc. Program (CYF, CYF:C majors).
Department(s): Department of Family Relations and Applied Nutrition

FRHD*2060 Adult Development and Aging F (3-0) [0.50]
This course provides an overview of major theoretical approaches, research issues and methodologies, and significant research findings which relate to adult development and aging.

Prerequisite(s): 1 of ANTH*1150, FRHD*1010, FRHD*1100, PSYC*1000, PSYC*1100, PSYC*1200, SOC*1100
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*2100 Development of Human Sexuality F (3-0) [0.50]
This course covers a social scientific analysis of human sexuality. Emphasis will be placed on the development of sexuality within an interpersonal context.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): 4.50 credits
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*2110 Children and Youth with Exceptionalities F (3-0) [0.50]
This course provides an overview of childhood exceptionalities including intellectual differences, communication disorders, sensory impairments, developmental and behaviour disorders, and health problems. Issues faced by the exceptional child as well as the parents and siblings are discussed.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): 1 of FRHD*1020, FRHD*2060, FRHD*2260, FRHD*2280, (FRHD*2270 or PSYC*2450)
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*2260 Infant Development W (3-0) [0.50]
This course is an examination of developmental principles and milestones characterizing infant development from conception to 24 months. Emphasis will be placed on understanding the nature of the reciprocal family-infant interactions during this period, and on the societal context influencing those interactions.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): 1 of ANTH*1150, FRHD*1010, FRHD*1100, PSYC*1000, PSYC*1100, PSYC*1200, SOC*1100
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*2270 Development in Early and Middle Childhood F (3-0) [0.50]
This course is an examination of development in the early and middle childhood years, with emphasis on family and societal contexts.

Prerequisite(s): 1 of ANTH*1150, FRHD*1010, FRHD*1100, PSYC*1000, PSYC*1100, PSYC*1200, SOC*1100
Restriction(s): PSYC*2450 This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*2280 Adolescent Development W (3-0) [0.50]
This course explores psychosocial development in adolescence, emphasizing physiological, social and emotional changes.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): 1 of ANTH*1150, FRHD*1010, FRHD*1100, PSYC*1000, PSYC*1100, PSYC*1200, SOC*1100
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*2400 Introduction to Human Services W (3-0) [0.50]
This course explores the roles, responsibilities and competencies of work in human services, emphasizing the development of professional knowledge, skills and ethical values for working with individuals and families in a variety of settings. Major topics covered in this course will include working with diverse populations, developing professional communication skills, professional values and ethical practice, self-awareness, self-care, career exploration, program planning and implementation.

Prerequisite(s): 1 of FRHD*1010, FRHD*2060, FRHD*2270, FRHD*2280, PSYC*2450
Restriction(s): FRHD*2300 , FRHD*2350 . Restricted to students in BASc CYF, CYF:C, ADEV, ADEV:C
Department(s): Department of Family Relations and Applied Nutrition

FRHD*3040 Parenting and Intergenerational Relationships W (3-0) [0.50]
This course is a study of research concerning parent-child relationships across the lifespan.

Prerequisite(s): 9.50 credits including FRHD*1020, (1 of FRHD*1100, FRHD*2060, FRHD*2260, FRHD*2270, FRHD*2280, PSYC*2450)
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*3060 Principles of Social Gerontology F (3-0) [0.50]
A study of social and health aspects of individual and population aging, including theories and implications for understanding and working with the elderly.

Prerequisite(s): 9.50 credits including (FRHD*1020 or SOAN*3100)
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition
FRHD*3070 Research Methods: Family Studies F (3-0) [0.50]
This course is a critical examination of research methods in family studies.
Prerequisite(s): 4.50 credits
Restriction(s): Restricted to students in B.A.Sc.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*3090 Poverty and Health W (3-0) [0.50]
This course offers an in-depth examination of the factors associated with poverty across the lifespan, with a focus on the relationships between poverty and health and development. Poverty within vulnerable groups, issues concerning inequality and strategies to address poverty will also be explored.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 9.50 credits including (FRHD*1010 or FRHD*1100)
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*3150 Strategies for Behaviour Change W (3-0) [0.50]
This course will review the nature and use of behaviour change strategies commonly used in interventions with children, youth, and their families.
Prerequisite(s): 2 of FRHD*1010, FRHD*2060, FRHD*2260, (FRHD*2270 or PSYC*2450), FRHD*2280
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*3180 Observation and Assessment Laboratory F (2-1) [0.50]
Direct observation as a strategy for collecting information on children's behaviour in applied and research settings is the focus of this laboratory course. Emphasis will be placed on theory, recording and interpreting observational data and communicating findings in written reports.
Prerequisite(s): FRHD*2110, (1 of FRHD*2040, FRHD*2300, FRHD*2400)
Department(s): Department of Family Relations and Applied Nutrition

FRHD*3190 Administration of Programs for Children S, W (3-0) [0.50]
This course will review the nature and use of behaviour change strategies commonly used in interventions with children, youth, and their families.
Prerequisite(s): 7.00 credits including (1 of FRHD*2260, FRHD*2270, PSYC*2450)
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*3200 Practicum I: Child F,W (3-12) [1.00]
This practicum provides students with a seminar and supervised experience with children and is designed to demonstrate the application of theory studied earlier in the program. It will also provide opportunities for working directly with young people while examining such topics as the role of the teacher, teacher-child interaction, and program implementation. Students wishing to enrol in this course must consult with the instructor during course selection.
Prerequisite(s): FRHD*2040
Co-requisite(s): FRHD*3180, FRHD*3400
Restriction(s): Registration in the B.A.Sc. program (Child, Youth and Family or Child, Youth and Family Co-op majors). Instructor consent required.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*3250 Practicum I: Youth F,W (3-12) [1.00]
Through seminar and supervised experience with youth, students will demonstrate the application of theory studied earlier in the program. This practicum course will also provide opportunities for working directly with youth in a community setting while examining the role of the professionals involved and the communication with youth and community members. Developing skills in programming planning, implementation, and evaluation is a primary objective. Students wishing to enrol in this course must consult with the instructor during course selection.
Prerequisite(s): FRHD*2300 or FRHD*2400
Co-requisite(s): FRHD*3180, FRHD*3400
Restriction(s): Registration in the B.A.Sc. program (Child, Youth and Family or Child, Youth and Family Co-op majors). Instructor consent required.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*3290 Practicum I: Adult Development F,W (3-12) [1.00]
This course offers students an opportunity to participate in supervised field placement in health and social service agencies. The practicum and seminar will develop students' helping roles in agencies and facilitate the integration and application of theoretical knowledge from previous course work with practice. It will also provide opportunities for students to work directly with individuals and/or groups and to participate in on-going programs or services. Students wishing to enrol in this course must consult with the instructor during the course selection period.
Prerequisite(s): FRHD*2350 or FRHD*2400
Co-requisite(s): FRHD*3400
Restriction(s): Restricted to students in B.A.Sc. ADEV, ADEV-C, ADFW, ADFW-C.
Instructor consent required.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*3300 Communication and Counselling Skills F,W (3-0) [0.50]
This course is an examination and analysis of the theories and methods of communication as applied within the processes of family counseling and consultation.
Prerequisite(s): 4.50 credits including (FRHD*1020 or FRHD*1100)
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*3500 Research Internship S,F,W (0-6) [0.50]
This course will give students a direct, initial experience in conducting research in Family Relations and Human Development. The internship focuses on familiarizing students with the research process and building research skills through active engagement in research under the direct guidance of a faculty member.
Prerequisite(s): FRHD*3070, STAT*2090
Restriction(s): Instructor consent required.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4020 Family Theory F (3-0) [0.50]
This course analyses theoretical approaches and concepts in the study of the family.
Prerequisite(s): 12.50 credits including FRHD*1020
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4070 Topics in Family Relations and Human Development U (3-0) [0.50]
Lecture-discussion or seminar on a selected topic in family studies. To be conducted by regular or visiting faculty with expertise in the area. Students should check with the Department of Family Relations and Applied Nutrition to determine what topic will be offered during specific semesters and which prerequisites, if any, are appropriate.
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4080 Topics in Family Relations and Human Development U (3-0) [0.50]
Lecture-discussion or seminar on a selected topic in family studies. To be conducted by regular or visiting faculty with expertise in the area. Students should check with the Department of Family Relations and Applied Nutrition to determine what topic will be offered during specific semesters and which prerequisites, if any, are appropriate.
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition
FRHD*4190 Assessment in Gerontology F (2-2) [0.50]
This course provides an examination and critique of current methods of assessing older adults. Tools to be considered include those for assessing dementia, depression, and pain. Students will examine diagnostic criteria that form the underpinnings of most tests and then examine each test for its psychometric properties and appropriate use. An understanding of the ethical principles governing assessment will be gained.
Prerequisite(s): 14.50 credits including FRHD*2060
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4200 Issues in Human Sexuality W (3-0) [0.50]
An advanced analysis of sexual development. Specific attention will be given to sexual problems, and the concepts, methods and issues associated with sex education and counselling.
Prerequisite(s): FRHD*1020, FRHD*2100 and 1.00 credit at the 3000 level in Family Relations and Human Development, Psychology or Sociology
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4210 Senior Seminar in Early Education and Care F (3-0) [0.50]
The course offers a study of the historical and philosophical basis of programs for young children evaluated from a developmental perspective. Emphasis will be on current approaches and programs and contemporary issues in early childhood programming.
Prerequisite(s): FRHD*3200
Equate(s): CSTU*4210
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4250 Aging and Health W (3-0) [0.50]
This course offers upper level undergraduates a forum to explore issues related to aging and health across the adult life span. More specifically, the conceptual groundwork necessary for understanding the roles of the life span developmental perspective, individual development, physiological changes in human aging, contextual influences and interactions, and several models/theories of aging and health will be examined. A primary objective of the course is the integration of models and theory to facilitate understanding of aging and health topics. Topics include but are not limited to: age changes and disease processes (both acute and chronic); mental health and illness; medication use; disease prevention and health promotion; influence of health on family relationships, caregiving, and placement decisions; systemic and societal influences on health; and ethical issues and controversies surrounding the end-of-life care and decision making, advanced directives, assisted suicide, and death and dying.
Prerequisite(s): 10.00 credits including FRHD*2060
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4260 Social Policy and Gerontology W (3-0) [0.50]
This course examines aging and adult development in relation to social policy with special reference to families.
Prerequisite(s): 9.50 credits including FRHD*2060
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4290 Practicum II: Adult Development F,W (3-16) [1.00]
This course enables students to extend their knowledge and professional skills in a second supervised placement working with adults of all ages, and their families. A variety of institutional settings are considered (e.g., school systems, treatment agencies, youth residential programs, senior care facilities, hospitals). The complexities of professional practice with diverse populations are explored in depth. Professional communication skills and relevant legal aspects are also addressed.
Prerequisite(s): 14.00 credits including FRHD*3400
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4320 Social Policies for Children, Youth and Families W (3-0) [0.50]
This course focuses on current social policies, programs, and services that affect children's development and family well-being. Issues include policies that affect income security, parental effectiveness, social service provision, and community resources.
Prerequisite(s): 9.50 credits
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4330 Practicum II: Child F,W (3-16) [1.00]
This course enables students to extend their knowledge and professional skills in a second supervised placement working with children in a health, education or social service agency. The practicum and seminar provides students with additional opportunities to integrate theoretical knowledge with practice experiences. Students are expected to assume additional responsibilities related to program design and implementation and in their supervised work with individuals and/or groups.
Prerequisite(s): FRHD*3200 or FRHD*3250
Restriction(s): FRHD*4170, FRHD*4290, FRHD*4340, Restricted to students in CYF and CYF:C major. Instructor consent required.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4340 Practicum II: Youth F,W (3-16) [1.00]
This course enables students to extend their knowledge and professional skills in a second supervised placement working with youth in a health or social service agency. The practicum and seminar provides students with additional opportunities to integrate theoretical knowledge with practice experiences. Students are expected to assume additional responsibilities related to program design and implementation and in their supervised work with individuals and/or groups.
Prerequisite(s): FRHD*3200 or FRHD*3250
Restriction(s): FRHD*4170, FRHD*4290, FRHD*4340, Restricted to students in CYF and CYF:C major. Instructor consent required.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4350 Practicum III: Child F,W (3-16) [1.00]
This course provides advanced undergraduate students with further direct experience working primarily with children aged 0-12 years within the context of a community or school setting. Students will continue to develop applied skills in leadership, communication, teamwork, and reflective practice; implement and evaluate effective programs/programming; assess personal interests and strengths in working with children; develop an appreciation of the role of the family in these settings; and examine the role of continuous professional learning for early childhood professionals.
Prerequisite(s): FRHD*3200 or FRHD*3250
Restriction(s): FRHD*4170, FRHD*4290, FRHD*4340, Restricted to students in CYF and CYF:C major. Instructor consent required.
Department(s): Department of Family Relations and Applied Nutrition

FRHD*4400 Youth, Risk and Resilience W (3-0) [0.50]
This course examines biological, and social-contextual aspects of developmental issues evident in childhood and adolescence. The theoretical perspective of developmental psychopathology will be used to examine literatures relating to risk, resilience, developmental trajectories, classification, assessment, and intervention. Students will have a chance to critically examine many mental health issues commonly found in childhood and adolescence.
Prerequisite(s): 14.00 credits including (1 of FRHD*1010, FRHD*2060, FRHD*2270, FRHD*2280, PSYC*2450)
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see departmental website for more information.
Department(s): Department of Family Relations and Applied Nutrition
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRHD*4810 U</td>
<td>Thesis I U</td>
<td>3-0 [0.50]</td>
<td>Planning, developing and writing a research proposal under individual faculty supervision. Topic to be decided by the student in consultation with the supervisory faculty member before she/he may course select or register for the course. Students are advised to contact the Department of Family Relations and Applied Nutrition for further information.</td>
</tr>
<tr>
<td></td>
<td>Prerequisite(s):</td>
<td>FRHD*3070</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equate(s):</td>
<td>CSTU*4810</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Restriction(s):</td>
<td>Instructor consent required.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department(s):</td>
<td>Department of Family Relations and Applied Nutrition</td>
<td></td>
</tr>
<tr>
<td>FRHD*4910 U</td>
<td>Thesis II U</td>
<td>6-0 [1.00]</td>
<td>The student will conduct and write an undergraduate thesis under the direction of a faculty member.</td>
</tr>
<tr>
<td></td>
<td>Prerequisite(s):</td>
<td>FRHD*4810</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equate(s):</td>
<td>FRHD*4911/2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department(s):</td>
<td>Department of Family Relations and Applied Nutrition</td>
<td></td>
</tr>
</tbody>
</table>
## Food, Agricultural and Resource Economics

### FARE*1400 Economics of the Agri-Food System W (4-0) [1.00]
This course introduces students to the major aspects of economics, business and resource use in the Canadian agrifood sector. Students will be exposed to the techniques used by agrifood firms to plan, invest and measure performance. Decision making under both certainty and uncertainty will be considered. Students will be shown how the market equilibrium model can be used to conduct welfare analysis and modified to account for imperfect competition and externalities.

**Restriction(s):** This is a Priority Access Course. Restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*2410 AgriFood Markets and Policy W (3-0) [0.50]
Students will be provided with an introduction to agrifood markets, policies and institutions. Focus will be placed on: the role and function of futures markets; domestic agrifood policies; and agrifood trade policies, instruments and institutions. Economic analysis of contemporary issues in agrifood markets will be emphasized.

**Prerequisite(s):** FARE*1040 or FARE*1400

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*2700 Survey of Natural Resource Economics F (3-0) [0.50]
This course examines how humans, within a society, allocate natural resources - e.g., water, land, forests, and fisheries. Economic concepts and methods provide the basis for discussing and understanding both the use and misuse of natural resources.

**Prerequisite(s):** 1 of ECON*1050, FARE*1040, FARE*1400

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*3000 Food Industry Analysis and Policy F (3-0) [0.50]
This course explores the structure and functioning of the post-farm gate food sector through an applied industrial organization lens. Attention focuses on: the economic and business structure of the post-farm gate food industry; the economics of research and development, and innovation and commercialization in the food sector; the price and non-price strategies used in the industry; the economics of food safety and quality; and regulations and standards as it relates to food processing, distribution and retailing.

**Prerequisite(s):** 9.50 credits including (1 of ECON*1050, FARE*1040, FARE*1400), (1 of ECON*2740, STAT*2040, STAT*2060)

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*3030 The Firm and Markets F (3-1) [0.50]
A course in microeconomic theory applied to agricultural economics research. The theory of the firm is used to analyze production and resource use in agriculture. Resource allocation issues, risk, responsive decision-making, and firm strategy on vertical and horizontal integration are studied. Consumer theory is used to analyze food purchase decision. How theoretical relationships are quantified and used in the analysis of public policy issues is emphasized.

**Prerequisite(s):** ECON*2310, ECON*2770, ECON*3740

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*3170 Cost-Benefit Analysis W (3-0) [0.50]
The primary objective of this course is to introduce students to the basic principles of Cost-Benefit Analysis so that they can evaluate the worthiness of a public project or policy. Special emphasis is given to the trade-offs associated with agricultural, environmental and natural resource policies.

**Prerequisite(s):** 1 of ECON*2100, ECON*2310, ECON*2650, FARE*2700

**Restriction(s):** This is a Priority Access Course. Restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*3250 Food and International Development F (3-0) [0.50]
This course provides students with an economic perspective on issues in international development related to food, agriculture, and household behaviors. Different economic theories and approaches are used to understand various economic phenomena in the development context. Students are encouraged to consider critically an economic approach to the analysis of development issues related to food and agriculture, alongside the perspectives of other social science disciplines. Throughout the course, food and agriculture as development issues are considered primarily on a micro level, with a special focus on household behavior and decision-making.

**Prerequisite(s):** (FARE*1040 or ECON*1050), (FARE*1300 or ECON*1100)

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*3310 Operations Management F,W (3-0) [0.50]
The decision-making role of the operations manager in transforming inputs into desired outputs is the primary focus of this course. The major issues and problems of designing, scheduling, operating, and controlling the production system will be examined.

**Prerequisite(s):** (ACCT*1220 or ACCT*2220 ), (1 of ECON*2740, PSYC*1010, STAT*2040, STAT*2060, STAT*2120)

**Restriction(s):** This is a Priority Access Course. Restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*3320 Supply and Value Chain Management F (3-0) [0.50]
This course focuses on the coordination of decision-making along food industry supply chains and networks to achieve strategic and operational goals. This course uses a case-based approach to instruct students in the principles of supply chain management and key concepts for the analysis of supply chain management issues.

**Prerequisite(s):** FARE*3310

**Restriction(s):** This is a Priority Access Course. Restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*4000 Agricultural and Food Policy W (3-0) [0.50]
A critical analysis of agricultural income, marketing, adjustment and trade problems and policies in the developed countries, with particular emphasis on Canadian agricultural policies.

**Prerequisite(s):** 15.00 credits including ECON*2310

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*4210 World Agriculture, Food Security and Economic Development F (3-0) [0.50]
This course examines the role of agriculture in determining food security within developing countries and in promoting overall processes of economic development. The course uses economic concepts to understand the inter-relationships between agriculture system and access to food, including the supply of food and the livelihoods of those engaged in the agri-food system. Analyses of economic policies and programs in developing countries and their effect on poverty, food security and economic development are conducted.

**Prerequisite(s):** 10.00 credits including (FARE*1040 or ECON*1050), ECON*1100

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*4220 Advanced Agribusiness Management W (3-0) [0.50]
This course is oriented toward practical application of theory and analytical principles to the identification, analysis and solution of an agribusiness organization/management problems. Students work on a major agribusiness project as management consultants with an owner/operator. The course builds upon students' prior training in accounting, finance, mathematical analysis, computer applications, economics, agriculture and management.

**Prerequisite(s):** 1 of FARE*2410, BUS*3320 , ECON*2770, MGMT*3320

**Department(s):** Department of Food, Agricultural and Resource Economics

### FARE*4240 Futures and Options Markets W (3-0) [0.50]
This course is an introduction to the study of the theory and application of futures, options and other derivative instruments for marketing, hedging, investment and speculative purposes. Emphasis is placed on applications of agricultural and financial instruments to real business situations.

**Prerequisite(s):** 10.00 credits including (1 of ECON*2560, ECON*3560, FARE*2410, MGMT*3320)

**Restriction(s):** This is a Priority Access Course. Restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Food, Agricultural and Resource Economics
**FARE*4290 Land Economics F (3-0) [0.50]**

The economics of property rights is applied to issues in the allocation of land among agricultural, urban and other uses: contemporary trends, problems and policies in land planning, including expropriation and regulatory takings, soil erosion policy, farmland protection policy, endangered species policy and landfills and recycling.

**Prerequisite(s):** (FARE*2700, or ECON*2310) 0.50 credits at the 3000 or 4000 level in FARE or ECON

**Department(s):** Department of Food, Agricultural and Resource Economics

---

**FARE*4300 Resource Economics W (3-0) [0.50]**

This course explores the role of property rights and related institutions in natural resource stewardship. Potential applications of this perspective to natural resource policy, both in Canada and internationally, are considered. Classes use a discussion-based approach.

**Prerequisite(s):** 1 of FARE*2700, ECON*2310, ECON*2100, 0.50 credits at the 3000 or 4000 level in FARE or ECON

**Department(s):** Department of Food, Agricultural and Resource Economics

---

**FARE*4310 Resource Economics W (3-0) [0.50]**

This course explores the role of property rights and related institutions in natural resource stewardship. Potential applications of this perspective to natural resource policy, both in Canada and internationally, are considered. Classes use a discussion-based approach.

**Prerequisite(s):** 1 of FARE*2700, ECON*2310, ECON*2100, 0.50 credits at the 3000 or 4000 level in FARE or ECON

**Department(s):** Department of Food, Agricultural and Resource Economics

---

**FARE*4330 Advanced Operations Management W (4-0) [0.50]**

This course focuses on the decision-making role of the operations manager. It provides students with the opportunity to explore and apply their knowledge in a case-based, project-based course addressing issues and topics in the food industry. The course focuses on the fundamental concepts, issues, and techniques for efficient and effective operations. Topics include location strategy, process strategy, forecasting, inventory management, scheduling, project management, queuing management, supply chain management, lean operations and maintenance.

**Prerequisite(s):** FARE*3320

**Department(s):** Department of Food, Agricultural and Resource Economics

---

**FARE*4360 Marketing Research W (3-0) [0.50]**

A study of the marketing research function in business with emphasis on its role in providing information to assist managers in making marketing decisions.

**Prerequisite(s):** 1 of ECON*2740, PSYC*1010, STAT*2040, STAT*2050, STAT*2060, STAT*2080

**Department(s):** Department of Food, Agricultural and Resource Economics

---

**FARE*4370 Food & Agri Marketing Management F (3-0) [0.50]**

The course focuses on the decision-making role of the marketing manager who is responsible for formulating the strategic marketing plan for food and agricultural businesses. The theory of selecting market target(s) for the firm’s product and/or services and the development of the marketing mix (product, price, promotion, distribution) with the aid of market research is covered. Note: Students with credit for this course may not proceed to MCS*1000.

**Prerequisite(s):** 10.00 credits including 1 of ACCT*2230, AGEC*2230, BUS*2230, COST*2600, MCS*2600

**Equate(s):** MCS*4370

**Restriction(s):** This is a Priority Access Course. Restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Food, Agricultural and Resource Economics

---

**FARE*4380 Retailing, Merchandising and Sales W (3-0) [0.50]**

This course explores the merchandising and sales function, strategies and practices used by the retail food sector. The course includes development and application of concepts tied to effective sales management, as well as strategies and approaches to undertaking retail merchandising. Where relevant, focus is placed on business-to-business or business-to-consumer approaches. Students will learn to plan, execute, and evaluate sales and retail merchandising programs in a variety of alternative distribution channels.

**Prerequisite(s):** FARE*3320, FARE*4370

**Restriction(s):** MCS*4060

**Department(s):** Department of Food, Agricultural and Resource Economics

---

**FARE*4500 Decision Science F (3-0) [0.50]**

Quantitative techniques such as classical optimization, mathematical programming, simulation and input-output models are applied to firm, interregional, industry, and international problem situations in agricultural economics, including those dealing with resources and the environment. Time and risk and uncertainty dimensions are addressed.

**Prerequisite(s):** ECON*2770

**Equate(s):** AGEC*4500

**Department(s):** Department of Food, Agricultural and Resource Economics

---

**FARE*4550 Independent Studies I S,F,W (3-0) [0.50]**

A project based independent study course for majors in Agricultural Economics (of the Bachelor of Arts or Bachelor of Science in Agriculture degree programs), Agribusiness (of the Bachelor of Commerce degree program), and Environmental Economics and Policy (of the Bachelor of Science in Environmental Sciences degree program).

**Prerequisite(s):** 10.00 credits including 1 of AGEC*2410, AGEC*2700, AGR*2401/2, FARE*2410, FARE*2700

**Restriction(s):** Instructor consent required. Permission of the instructor and Chair of the Department of Food, Agricultural and Resource Economics is required.

**Department(s):** Department of Food, Agricultural and Resource Economics

---

**FARE*4560 Independent Studies II S,F,W (3-0) [0.50]**

An opportunity to conduct a second independent study project for majors in Agricultural Economics (of the Bachelor of Arts or Bachelor of Science in Agriculture degree programs), Agribusiness (of the Bachelor of Commerce degree program), and Environmental Economics and Policy (of the Bachelor of Science in Environmental Sciences degree program).

**Prerequisite(s):** 10.00 credits including 1 of AGEC*2410, AGEC*2700, AGR*2401/2, FARE*2410, FARE*2700

**Restriction(s):** Instructor consent required. Permission of the instructor and Chair of the Department of Food, Agricultural and Resource Economics is required.

**Department(s):** Department of Food, Agricultural and Resource Economics

---
Food Science

Department of Food Science

FOOD*2010 Principles of Food Science S,W (3-0) [0.50]
The principles involved in the processing, handling and storage of foods are introduced in this course. The relationship of science and technology to food processing is discussed.
Offering(s): Offered through Distance Education format only.
Restriction(s): FOOD*2150, FOOD*3090, NUTR*2150
Department(s): Department of Food Science

FOOD*2100 Communication in Food Science W (3-0) [0.50]
Students will acquire basic skills in technical and business communication and be prepared to complete a variety of communication assignments in subsequent semesters. Students will learn and apply the principles of effective written and oral communication.
Restriction(s): Restricted to students in BSC.FOOD, BSC.FOOD:C, BBRM.FIM, BBRM.FIM:C majors
Department(s): Department of Food Science

FOOD*2150 Introduction to Nutritional and Food Science F (3-0) [0.50]
This interdisciplinary course provides an introduction to the Food and Nutritional Sciences from both historical and modern perspectives. Major themes are the nutritional and functional properties of food, nutrient assimilation, food preservation and safety, and the interactions between food processing, diets and health. (Also listed as NUTR*2150.)
Prerequisite(s): (BIOL*1040 or BIOL*1080), CHEM*1040
Equate(s): NUTR*2150
Restriction(s): FOOD*2100, FOOD*3090 Not available to students registered in BASC.AHN major.
Department(s): Department of Food Science

FOOD*2400 Introduction to Food Chemistry S (3-0) [0.50]
The chemistry and biochemistry of the major components of foods (lipids, proteins, carbohydrates and water/ice) are introduced in this course. In addition, an overview of some of the reactions and changes in food components which occur during processing, handling and storage will be presented. This course may not be taken for credit by students in the Food Science Major.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): CHEM*1040
Restriction(s): FOOD*3030, FOOD*3050
Department(s): Department of Food Science

FOOD*2410 Introduction to Food Processing W (3-0) [0.50]
Food processes and the relationships between chemistry, microbiology, and engineering as they apply to food processing are discussed. The following topics are included: high and low temperature processes; moisture control and intermediate moisture foods; concentration and dehydration processes; and novel food processing techniques.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): CHEM*1040, (1 of BIOL*1040, BIOL*1070, BIOL*1080, MICR*2420)
Restriction(s): FOOD*3160, FOOD*3170 Not available to students registered in BSC.FOOD or BSC.FOOD:C majors.
Department(s): Department of Food Science

FOOD*2420 Introduction to Food Microbiology F (3-0) [0.50]
An introduction to the major groups of microorganisms important in foods is presented in this course, including microbial spoilage of food, food-borne illness, and food fermentations. Sources of contamination during production, processing and storage of foods and evaluation of food processing conditions used to control the presence and/or growth of microorganisms in foods are discussed.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 1 of BIOL*1040, BIOL*1070, MICR*2420
Restriction(s): FOOD*3230. FOOD*3240. Not available to students registered in BSC.FOOD or BSC.FOOD:C majors.
Department(s): Department of Food Science

FOOD*2620 Food Engineering Principles W (3-2) [0.50]
Introduction to engineering principles and operations in food processing including heat transfer, fluid flow, material and energy balances, instrumentation and process control concepts.
Prerequisite(s): (BIOC*2580 or CHEM*2880), (1 of MATH*1030, MATH*1080, MATH*1200)
Department(s): Department of Food Science

FOOD*3030 Food Chemistry I F (3-3) [0.50]
This course covers the fundamental principles of the chemistry of foods. The course will discuss selected topics related to the chemistry (physical, organic and analytical) and physics of the major components in food materials such as lipids, proteins, carbohydrates and water.
Prerequisite(s): BIOC*2580
Restriction(s): Registration is limited to students registered in the BSCH.FOOD, FOOD:C or BASC.AHN majors.
Department(s): Department of Food Science

FOOD*3040 Food Chemistry II W (3-0) [0.50]
This course covers the fundamental principles of the chemistry of foods, as a continuation of FOOD*3030. This course will discuss topics related to the chemistry (physical, organic and analytical) and physics of the major components in food materials such as lipids, proteins, carbohydrates and water. This course is the same as FOOD*3050, without the laboratory component.
Prerequisite(s): BIOC*2580
Restriction(s): FOOD*2400, FOOD*3030. Not available to students registered in BSCH.FOOD or FOOD:C majors.
Department(s): Department of Food Science

FOOD*3050 Food Chemistry I F (3-0) [0.50]
This course covers the fundamental principles of the chemistry of foods. The course will discuss selected topics related to the chemistry (physical, organic and analytical) and physics of the major components in food materials such as lipids, proteins, carbohydrates and water. This course is the same as FOOD*3040, without the laboratory component.
Prerequisite(s): FOOD*3030 or FOOD*3050
Restriction(s): FOOD*3040. Not available to students registered in BSCH.FOOD or BSCH.FOOD:C majors.
Department(s): Department of Food Science

FOOD*3060 Food Science II W (3-0) [0.50]
This course covers the fundamental principles of the chemistry of foods, as a continuation of FOOD*3050. This course will discuss topics related to the chemistry (physical, organic and analytical) and physics of emulsions and emulsifiers, pigments, flavors and flavor perception, enzymes and processing additives. This course is the same as FOOD*3040, without the laboratory component.
Prerequisite(s): FOOD*3030 or FOOD*3050
Restriction(s): FOOD*3040. Not available to students registered in BSCH.FOOD or BSCH.FOOD:C majors.
Department(s): Department of Food Science

FOOD*3090 Food Science and Human Nutrition F (3-2) [0.50]
This course will introduce students to the chemistry and microbiology of food and post-production food handling and processing. It will also introduce students to the role of food components in human nutrition and the interactions between diets and health. Food product development will integrate these two disciplines. Lectures will be taken simultaneously with students in FOOD*2150/NUTR*2150. Lectures will be supplemented with a series of laboratory assignments.
Prerequisite(s): (AGR*1250 or AGR*1110), (1 of BIOL*1040, BIOL*1050, BIOL*1080), CHEM*1040
Restriction(s): FOOD*2100, FOOD*2150, NUTR*2150. Restricted to students in BSC(Agr) as well as students in the Minor in Agriculture.
Department(s): Department of Food Science

FOOD*3140 Food Processing I F (3-0) [0.50]
This course builds on basic engineering principles to understand the operation of modern food processing plant facilities. The standard equipment used and the underlying principles that control their operation are examined for various high temperature (blanching, pasteurization, sterilization, evaporation, drying, extrusion) and ambient temperature (size reduction, homogenization, emulsification, centrifugation, filtration, extraction, irradiation) unit operations.
Offering(s): First offering - Fall 2020
Prerequisite(s): ENGG*2660 or [FOOD*2620, (MICR*2030 or MICR*2420)]
Restriction(s): FOOD*3160. Not available to students registered in BSC.FOOD or BSC.FOOD:C
Department(s): Department of Food Science

FOOD*3160 Food Processing I F (3-3) [0.75]
This course builds on basic engineering principles to understand the operation of modern food processing plant facilities. The standard equipment used and the underlying principles that control their operation are examined for various high temperature (blanching, pasteurization, sterilization, evaporation, drying, extrusion) and ambient temperature (size reduction, homogenization, emulsification, centrifugation, filtration, extraction, irradiation) unit operations.
Prerequisite(s): ENGG*2660 or [FOOD*2620, (MICR*2030 or MICR*2420)]
Department(s): Department of Food Science

Last Revision: July 4, 2019
2019-2020 Undergraduate Calendar
FOOD*3170 Food Processing II W (3-3) [0.50]
This course looks at various low temperature food processing unit operations (e.g., refrigerated storage, freezers, freeze dryers), the design and operation of ancillary food plant equipment (e.g., refrigeration, boiler, pumping, control, sanitation, water, and wastewater treatment systems) and integration of the various unit operations into a functioning food process.
Prerequisite(s): FOOD*3140 or FOOD*3160
Department(s): Department of Food Science

FOOD*3230 Food Microbiology F (3-3) [0.75]
Important groups of microorganisms associated with food spoilage, food fermentations, food infections and intoxications are discussed in this course. Intrinsic and extrinsic factors and their relationship to microbial growth, control of microorganisms by food processing and application of Hazard Analysis Critical Control Points (HACCP) programs are also discussed. This course is the same as FOOD*3230, without the laboratory component.
Prerequisite(s): MICR*2420
Restriction(s): FOOD*2420, FOOD*3240 Restricted to students in BSCH.FOOD, FOOD.C, MICR, MICR.C and BASC.AHN majors.
Department(s): Department of Food Science

FOOD*3240 Food Microbiology F (3-0) [0.50]
Important groups of microorganisms associated with food spoilage, food fermentations, food infections and intoxications are discussed in this course. Intrinsic and extrinsic factors and their relationship to microbial growth, control of microorganisms by food processing and application of Hazard Analysis Critical Control Points (HACCP) programs are also discussed. This course is the same as FOOD*3230, without the laboratory component.
Prerequisite(s): MICR*2420
Restriction(s): FOOD*2420, FOOD*3240 Restricted to students in BSCH.FOOD, FOOD.C, MICR, MICR.C and BASC.AHN majors.
Department(s): Department of Food Science

FOOD*3260 Industrial Microbiology W (3-3) [0.50]
The course will present microbiological and technological principles of the industrial application of microorganisms followed by specific examples. Lectures will cover the basics of metabolic pathways and how these can be manipulated through selection or genetic engineering to increase productivity. The main focus of the course will be in the production of alcoholic beverages but will also include production of biomass, solvents, amino acids and organic acids of direct relevance to the food industry. The laboratory component of the course will include wine production, beer brewing and dairy fermentations. Field trips to a commercial winery and brewery will also aid the learning experience.
Prerequisite(s): MICR*2420
Restriction(s): FOOD*3270 Students must be of legal drinking age in the Province of Ontario. Restricted to students in BSCH.FOOD, FOOD.C, MICR or MICR.C majors.
Department(s): Department of Food Science

FOOD*3270 Industrial Microbiology W (3-0) [0.50]
The course will present microbiological and technological principles of the industrial application of microorganisms followed by specific examples. Lectures will cover the basics of metabolic pathways and how these can be manipulated through selection or genetic engineering to increase productivity. The main focus of the course will be in the production of alcoholic beverages but will also include production of biomass, solvents, amino acids and organic acids of direct relevance to the food industry. Field trips to a commercial winery and brewery will also aid the learning experience. This course is the same as FOOD*3260, without the laboratory component.
Prerequisite(s): MICR*2420
Restriction(s): FOOD*3260 Students must be of legal drinking age in the Province of Ontario. Not available to students registered in BSCH.FOOD or BSCH.FOOD.C majors.
Department(s): Department of Food Science

FOOD*3340 Introduction to Food Analysis F (3-0) [0.50]
This course offers an introduction to quantitative analysis of foods by chemical, physical and instrumental means. Determination of both major and minor constituents of foods are discussed.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): FOOD*2400
Restriction(s): FOOD*4120, FOOD*4190
Department(s): Department of Food Science

FOOD*3700 Sensory Evaluation of Foods W (3-3) [0.50]
This course is an introduction to sensory science. Students will gain an understanding of the factors contributing to sensory perception of foods. Sensory methodology and statistical tools for evaluation of all sensory aspects of food will be provided and all students will gain hands-on experience with implementation, statistical analysis and interpretation of sensory data. Consumer sensory testing methods will also be discussed.
Prerequisite(s): (FOOD*2150 or HTM*2700), (1 of STAT*2040, STAT*2060, STAT*2080)
Restriction(s): This is a Priority Access Course. Registration may be restricted to students in BSCH.FOOD, BSCH.FOOD.C, BBRM.FIM, BBRM.FIM.C, BCOM.HTM, BCOM.HTM.C or BASC.AHN during certain periods.
Department(s): Department of Food Science

FOOD*4020 Quality Management in the Food Industry W (4-0) [0.50]
Quality management is a business philosophy that focuses on maximizing customer satisfaction by ensuring the provision of products or services that consistently meet or exceed customer expectations. In this course, the student will come to understand the various definitions of quality as well as various quality management systems that are relevant to the food industry. The student will also gain an understanding of the crucial role of continuous improvement and monitoring customer satisfaction within the food industry. This course uses traditional lectures by the instructor and by guests from organizations that produce, ship, sell or regulate food products.
Offering(s): First offering - Winter 2022
Prerequisite(s): FARE*3310, FOOD*3170
Department(s): Department of Food Science

FOOD*4070 Food Packaging F (3-0) [0.50]
Functions of packaging in food preservation systems will be examined using a review of current packaging materials, their properties, production methods and applications for specific products. Additional topics include regulatory, environmental and marketplace influences on food packaging choices.
Prerequisite(s): 7.00 credits in science or engineering
Department(s): Department of Food Science

FOOD*4090 Functional Foods and Nutraceuticals W (3-0) [0.50]
The course examines the relation of functional foods and nutraceuticals (FFN) to food and drugs. The safety and efficacy of individual FFN products, and the regulatory issues that influence the development and commercialization of FFN in global markets are emphasized. Also listed as NUTR*4090.
Prerequisite(s): NUTR*3210
Equate(s): NUTR*4090
Department(s): Department of Food Science, Department of Human Health and Nutritional Sciences

FOOD*4110 Meat and Poultry Processing W (2-3) [0.50]
The course focuses on the principles and techniques employed by the meat industry in the production of raw and semi/fully cooked products. Lectures include a study of muscle structure and its relation to meat quality, the physical properties of meat proteins, lipids and flavour compounds important in meat processing. Practical applications of processing techniques (including producing different products in lab) packaging and merchandizing are emphasized in the laboratory. Other sources of animal proteins, such as eggs, are also covered. Emphasis is put on learning how various food science principles (e.g. emulsification, preservation, HACCP) are used to optimize meat products' quality and safety.
Prerequisite(s): 1 of ANSC*2340, FOOD*3090, FOOD*3140, FOOD*3160
Department(s): Department of Food Science

FOOD*4190 Advanced Food Analysis F (3-3) [0.50]
In this course the quantitative analysis of foods by chemical and physical methods will be studied with emphasis on modern/advanced technologies. Both major and minor constituents will be discussed.
Prerequisite(s): 1 of CHEM*2400, CHEM*2480, FOOD*3030, FOOD*3050
Co-requisite(s): Pre-requisites may be taken as co-requisites
Restriction(s): FOOD*4120
Department(s): Department of Food Science
**FOOD*4220 Topics in Food Science S,F,W (0-3) [0.50]**

Independent study of a selected topic in Food Science, involving a review and critical evaluation of the current literature. The course comprises independent library research and students are required to present a concise report in a written paper and in a seminar. Students must make arrangements with both faculty supervisor and the course co-ordinator in a prior course selection period.

**Prerequisite(s):** 14.00 credits including 1.50 credits at the 3000 level or higher in Food Science.

**Restriction(s):** Instructor consent required.

**Department(s):** Department of Food Science

**FOOD*4230 Research in Food Science S,F,W (0-3) [0.50]**

This course involves independent laboratory research of a selected topic in Food Science, under the supervision of an individual faculty. The laboratory research is based on the literature review conducted in FOOD*4220. In addition, a review and critical appraisal of experimental principles will guide the design of laboratory experiments. Students are required to present a concise report in a written paper and in a seminar. Students must make arrangements with both faculty supervisor and the course co-ordinator in a prior course selection period.

**Prerequisite(s):** FOOD*4220

**Co-requisite(s):** FOOD*4220

**Restriction(s):** Instructor consent required.

**Department(s):** Department of Food Science

**FOOD*4260 Food Product Development I F (3-3) [0.50]**

This course examines the research and development process related to new food products. Through a series of lectures and presentations students will learn the underlying theory behind food product development including idea generation, prototype development and new product manufacturing, evaluation and product marketing. Students will also gain a real world understanding of the process through their involvement and interaction with invited industry speakers. Students will work in teams with students from other disciplines to plan a food product development project.

**Prerequisite(s):** FOOD*2100, (FOOD*3030 or FOOD*3050), (FOOD*3140 or FOOD*3160), (FOOD*3230 or FOOD*3240), FOOD*3700

**Restriction(s):** FOOD*4100, FOOD*4700, MGMT*4020, MGMT*4030

**Department(s):** Department of Food Science

**FOOD*4270 Food Product Development II W (3-3) [0.50]**

This course will compliment the Food Product Development I course by further assisting students in gaining a comprehensive understanding of the principles and process of food product development. Students will use the theory obtained from the Food Product Development I course to put into practice and gain real life experience in the planning, conducting, and communicating results as a team while developing a pre-approved food product.

**Prerequisite(s):** FOOD*4260

**Restriction(s):** MGMT*4020, MGMT*4030

**Department(s):** Department of Food Science

**FOOD*4310 Food Safety Management Systems W (3-0) [0.50]**

Participants will learn and apply principles of food safety management and the systems involved. The course is organized in four modules: plant hygiene, principles of Hazard Analysis Critical Control Point (HACCP), HACCP based food safety programs in Canada, and ISO Food Safety Management Systems.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** (FOOD*2010 or FOOD*2150), (1 of FOOD*2410, FOOD*3140, FOOD*3160), (1 of FOOD*2420, FOOD*3230, FOOD*3240)

**Department(s):** Department of Food Science

**FOOD*4400 Dairy Processing W (3-3) [0.50]**

The production, processing, chemistry, microbiology and marketing of fluid milk, frozen dairy products, cheese, fermented dairy foods and butter are studied in this course.

**Prerequisite(s):** BIOC*2580, (FOOD*2150 or FOOD*3090), (MICR*2030 or MICR*2420)

**Department(s):** Department of Food Science

**FOOD*4520 Utilization of Cereal Grains for Human Food F (3-3) [0.50]**

The course will cover topics related to the history of agriculture as it relates to cereal grains; basic principles behind grain breeding and its relevance to grain quality and functionality; regulations as they relate to grain quality; fractionation of cereal components and their utilization; relationship between grain structure/composition and processing of cereal-based foods; principles of analytical tools commonly used to assess grain and product quality; science and technology as it relates to manufacturing and shelf life of common cereal-based foods from wheat, corn, rice and barley; functional and nutritional attributes of cereal grains; recent advances in cereal science and technology and the non-food uses of cereal grain components.

**Prerequisite(s):** BIOC*2580, (1 of BIOL*1040, BIOL*1070, BIOL*1080), (1 of AGR*2470, FOOD*2150, FOOD*3090, NUTR*3210)

**Department(s):** Department of Food Science
Frank B. Spalding

Chair of the French Department

School of Languages and Literatures

The School of Languages and Literatures offers a wide range of courses in French, including courses in French language, literature, and culture. This document provides an overview of the courses offered, including prerequisites, restrictions, and course descriptions.

**FREN*1000 French Language I F,W (3-1) [0.50]**
This course is an introduction to French language and culture. Students will learn basic French grammar and vocabulary through interactive activities and cultural immersion.

**FREN*1100 French Language II F,W (3-1) [0.50]**
This course continues the study of French language and culture. Students will develop more advanced language skills through reading, writing, and speaking.

**FREN*1200 French Language III F,W (3-1) [0.50]**
This course focuses on advanced language skills and cultural immersion. Students will engage in more complex conversations and written assignments.

**FREN*1300 French Language IV F,W (3-1) [0.50]**
This course is designed for students with advanced language skills. It focuses on cultural immersion and advanced language skills.

**FREN*2000 French Composition I F,W (3-0) [0.50]**
This course provides students with opportunities to develop their writing and composition skills in French.

**FREN*2500 French Composition II F,W (3-0) [0.50]**
This course further develops students' writing and composition skills in French.

**FREN*3000 French Literature I F,W (3-0) [0.50]**
This course introduces students to French literature, focusing on foundational works.

**FREN*3500 French Literature II F,W (3-0) [0.50]**
This course continues the study of French literature, focusing on later works.

**FREN*4000 French Literature III F,W (3-0) [0.50]**
This course provides an advanced study of French literature, focusing on specialized topics.

**FREN*4500 French Literature IV F,W (3-0) [0.50]**
This course offers an in-depth exploration of specific works and authors in French literature.

**FREN*5000 French Culture and Society F,W (3-0) [0.50]**
This course examines the cultural and societal context of French-speaking countries.

**FREN*5500 French Translation F,W (3-0) [0.50]**
This course introduces students to the art of translating French literature.

**FREN*6000 Independent Study F,W (3-0) [0.50]**
This course allows students to pursue a specific area of study under the guidance of a faculty advisor.

**FREN*6500 Seminar in French F,W (3-0) [0.50]**
This seminar focuses on a specific topic within French studies.

**FREN*7000 Research Project F,W (3-0) [0.50]**
This course provides students with the opportunity to conduct original research in a specific area of French studies.
XII. Course Descriptions, French Studies

FREN*3110 Storytelling in the Francophone World W (3-0) [0.50]
This course focuses on storytelling as a genre of folklore in various francophone traditions (French Canadian and American, European, Caribbean, African). Students will consider the functions of storytelling in culture and examine the structural and thematic components of folktales. Students will also explore the nature of storytelling from a performance perspective, reflecting on the elements that make good communication. Put into practice, storytelling will be used as a pedagogical tool to develop speaking, listening, reading and writing skills in French.

Offering(s): Offered in even-numbered years.
Prerequisite(s): FREN*2020, FREN*2060, FREN*2520
Department(s): School of Languages and Literatures

FREN*3130 Representing the Self F (3-0) [0.50]
By examining a variety of texts told by a real or fictional ‘I’, this course will explore such literary concerns as believable and unbelievable narrators, biography and autobiography and the construction of the self. Students will put to use their learning about the construction of the self in creating their own first-person narrative in French.

Offering(s): Offered in even-numbered years.
Prerequisite(s): FREN*2020, FREN*2060, FREN*2520
Department(s): School of Languages and Literatures

FREN*3140 Women in Literature, Art and Film W (3-0) [0.50]
This course will study French or Francophone women as creators of literary, artistic and cinematic works or might take the representation of women in literature, art or film as its focus. Drawing on specific contemporary theories, we will study representations of women's place, of the female body, class and linguistic identity, and of the creation of artistic work. Particular attention will be paid to the relationship between the personal and the socio-political spheres, sexual difference, and gender roles.

Offering(s): Offered in odd-numbered years.
Prerequisite(s): FREN*2020, FREN*2060, FREN*2520
Department(s): School of Languages and Literatures

FREN*3160 Songs, Lyric Poetry in French F (3-0) [0.50]
This course will provide students with the opportunity to explore the cultural richness of song lyrics and poetry in the Francophone world. By engaging with a variety of songs including, but not limited to: traditional folk, political songs ("chansons engagées"), hip-hop to "World music", students will explore several facets of this complex subject. Activities include: in-depth research on the arc of critical reception of a given songwriter or band, comparing the treatment of a specific theme (for example “money” or “apathy” or “nostalgia”) across musical genres, researching for a biography of a songwriter/poet (such as Richard Desjardins or Jacques Brel).

Offering(s): Offered in even-numbered years.
Prerequisite(s): FREN*2020, FREN*2060, FREN*2520
Department(s): School of Languages and Literatures

FREN*3170 Fictions of Childhood F (3-0) [0.50]
This course will examine the classics of francophone children’s literature (for example, works by Perrault, la Comtesse de Ségur, Jules Verne, or Goscinny) and take into account representations of children or childhood in autobiographical texts, novels or film. Students will address questions such as: How did children's literature develop as a separate genre? What are the characteristics of the various types of writing for children (fairy tales, adventure fiction, novels of school and home, fantasy)? What is the function of a child narrator in novels for children or adults?

Offering(s): Offered in even-numbered years.
Prerequisite(s): FREN*2020, FREN*2060, FREN*2520
Department(s): School of Languages and Literatures

FREN*3500 French Translation II F (3-0) [0.50]
This course introduces students to an analysis of the similarities and contrasts between French and English grammar. As well, the course introduces students to analysis of various literary styles, and to their application in written translation.

Offering(s): Offered in odd-numbered years.
Prerequisite(s): FREN*2500
Department(s): School of Languages and Literatures

FREN*3520 French Composition II W (3-0) [0.50]
This is a continuation of FREN*2520 with special emphasis on creative writing.

Offering(s): Offered through Distance Education format only.
Prerequisite(s): FREN*2020, FREN*2060, FREN*2520
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): School of Languages and Literatures

FREN*3610 Studies in French Literature and Culture in Nice F,W (3-0) [0.50]
Thematic courses relating to the literature, arts, and society of metropolitan France and of the Francophone world. Options may include other languages, literatures, and other disciplines in the arts and social sciences. For Nice students only.

Prerequisite(s): 1 of FREN*2020, FREN*2030, FREN*2060
Restriction(s): Admission to Nice Program.
Department(s): School of Languages and Literatures

FREN*3620 Studies in French Literature and Culture in Nice F,W (3-0) [0.50]
Thematic courses relating to the literature, arts, and society of metropolitan France and of the Francophone world. Options may include other languages, literatures, and other disciplines in the arts and social sciences. For Nice students only.

Prerequisite(s): 1 of FREN*2020, FREN*2030, FREN*2060
Restriction(s): Admission to Nice Program.
Department(s): School of Languages and Literatures

FREN*3630 Studies in French Literature and Culture in Nice F,W (3-0) [0.50]
Thematic courses relating to the literature, arts, and society of metropolitan France and of the Francophone world. Options may include other languages, literatures, and other disciplines in the arts and social sciences. For Nice students only.

Prerequisite(s): 1 of FREN*2020, FREN*2030, FREN*2060
Restriction(s): Admission to Nice Program.
Department(s): School of Languages and Literatures

FREN*3640 Studies in French Literature and Culture in Nice F,W (3-0) [0.50]
Thematic courses relating to the literature, arts, and society of metropolitan France and of the Francophone world. Options may include other languages, literatures, and other disciplines in the arts and social sciences. For Nice students only.

Prerequisite(s): 1 of FREN*2020, FREN*2030, FREN*2060
Restriction(s): Admission to Nice Program.
Department(s): School of Languages and Literatures

FREN*3650 Studies in French Literature and Culture in Nice F,W (3-0) [0.50]
Thematic courses relating to the literature, arts, and society of metropolitan France and of the Francophone world. Options may include other languages, literatures, and other disciplines in the arts and social sciences. For Nice students only.

Prerequisite(s): 1 of FREN*2020, FREN*2030, FREN*2060
Restriction(s): Admission to Nice Program.
Department(s): School of Languages and Literatures

FREN*3660 Studies in French Literature and Culture in Nice F,W (3-0) [0.50]
Thematic courses relating to the literature, arts, and society of metropolitan France and of the Francophone world. Options may include other languages, literatures, and other disciplines in the arts and social sciences. For Nice students only.

Prerequisite(s): 1 of FREN*2020, FREN*2030, FREN*2060
Restriction(s): Admission to Nice Program.
Department(s): School of Languages and Literatures

FREN*3670 Studies in French Literature and Culture in Nice F,W (3-0) [0.50]
Thematic courses relating to the literature, arts, and society of metropolitan France and of the Francophone world. Options may include other languages, literatures, and other disciplines in the arts and social sciences. For Nice students only.

Prerequisite(s): 1 of FREN*2020, FREN*2030, FREN*2060
Restriction(s): Admission to Nice Program.
Department(s): School of Languages and Literatures

FREN*3680 Studies in French Literature and Culture in Nice F,W (3-0) [0.50]
Thematic courses relating to the literature, arts, and society of metropolitan France and of the Francophone world. Options may include other languages, literatures, and other disciplines in the arts and social sciences. For Nice students only.

Prerequisite(s): 1 of FREN*2020, FREN*2030, FREN*2060
Restriction(s): Admission to Nice Program.
Department(s): School of Languages and Literatures

FREN*3690 Studies in French Literature and Culture in Nice F,W (3-0) [0.50]
Thematic courses relating to the literature, arts, and society of metropolitan France and of the Francophone world. Options may include other languages, literatures, and other disciplines in the arts and social sciences. For Nice students only.

Prerequisite(s): 1 of FREN*2020, FREN*2030, FREN*2060
Restriction(s): Admission to Nice Program.
Department(s): School of Languages and Literatures

Last Revision: July 4, 2019
2019-2020 Undergraduate Calendar
### FREN*3700 Experiential Learning and Language S,F,W (0-0) [0.50]

This course provides an opportunity for independent study based on an experiential project in French Studies. The project (approximately 70 hours) must be approved by a faculty member in the School of Languages and Literatures. It will include research about experiential learning, a reflective piece of writing and a public oral presentation about the project.

**Prerequisite(s):** 10.00 credits including 1.50 credits in French Studies.

**Restriction(s):** A minimum cumulative average of 70% in all French Studies course attempts. Instructor consent required.

**Department(s):** School of Languages and Literatures

### FREN*4010 The Art of Adaptation F (3-0) [0.50]

This course examines the relationship between source text and its adaptation(s). The art of adaptation will be addressed through theories of authorship, identity, intertextuality and genre. Students will reflect on the ways artistic creation is achieved by means of repetition and variation, and will analyse the forms and codes of the traditions that are inherited and often transgressed.

**Offering(s):** Offered in even-numbered years.

**Prerequisite(s):** 1.00 credits at the 3000-level in French.

**Department(s):** School of Languages and Literatures

### FREN*4020 Contemporary Francophone Theatre W (3-0) [0.50]

The focus of this course is French and Québécois plays by twentieth-century dramatists. The approach to the texts will center on the social, political, and cultural contexts of the plays as well as representations of class, gender, and the role of language. The course will look at theatre as text, dramaturgy, spectacle and role-playing, as well as examine the role of theatre in contemporary society.

**Offering(s):** Offered in odd-numbered years.

**Prerequisite(s):** 1.00 credits at the 3000-level in French.

**Restriction(s):** FREN*3120

**Department(s):** School of Languages and Literatures

### FREN*4290 Post-Colonial Francophone Fiction W (3-0) [0.50]

This is a survey course of the works of 20th-century Francophone writers from Maghreb, Black Africa and the Caribbean.

**Offering(s):** Offered in even-numbered years.

**Prerequisite(s):** 1.00 credits at the 3000-level in French.

**Department(s):** School of Languages and Literatures

### FREN*4600 Honours Seminar in French Studies F (3-0) [0.50]

This course is a seminar on literary genres, movements and themes, or on the French language.

**Offering(s):** Offered in odd-numbered years.

**Prerequisite(s):** 1.00 credits at the 3000-level in French.

**Department(s):** School of Languages and Literatures

### FREN*4740 Research Paper in French Studies I S,F,W (3-0) [0.50]

A research paper in French on an approved topic in French literature or language will be required. Individual attention will be given to methods of research and techniques of writing. This course is intended to serve as an introduction to future research at the M.A. and Ph.D. levels.

**Prerequisite(s):** 1.00 credits at the 3000-level in French.

**Restriction(s):** 70% average in all French Studies course attempts is required, although at least 75% is recommended. Instructor consent required.

**Department(s):** School of Languages and Literatures

### FREN*4770 Research Paper in French Studies II S,F,W (3-0) [0.50]

A research paper in French on an approved topic in French literature or language will be required. Individual attention will be given to methods of research and techniques of writing. This course is intended to serve as an introduction to future research at the M.A. and Ph.D. levels.

**Prerequisite(s):** FREN*4740

**Restriction(s):** 70% average in all French Studies course attempts is required, although at least 75% is recommended. Instructor consent required.

**Department(s):** School of Languages and Literatures
# Geography

**Department of Geography, Environment and Geomatics**

Students majoring in other departments may take a number of Geography courses without the prerequisites listed below if they obtain the permission of the instructor.

**Note:** Several courses in Geography are listed as acceptable for the Natural and Mathematical Science B.A. Distribution Requirements or as Non-Science Electives for B.S.C. students.

For courses without a semester designation, or with an alternate year designation, please check with the department.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*1200</td>
<td>Society and Space F (3-1)</td>
<td>0.50</td>
<td>This course introduces key concepts in contemporary Human Geography. The course applies a spatial perspective in exploring a wide ranging series of processes and issues in society. Topics include population growth and migration, models and challenges of urban and rural development, interpretation of cultural landscapes and selected issues relating to social welfare. <strong>Offering(s):</strong> Also offered through Distance Education format. <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*1220</td>
<td>Human Impact on the Environment F,W (3-0)</td>
<td>0.50</td>
<td>A global overview of the changing relationships among society, technology and the environment. This course emphasizes the major stages of human use of resources and the environmental consequences of global changes in production systems. It contrasts Third and First World experiences, focusing on core-periphery relationships. <strong>Offering(s):</strong> Also offered through Distance Education format. <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*1300</td>
<td>Introduction to the Biophysical Environment F,W (3-2)</td>
<td>0.50</td>
<td>This course provides an introduction to physical geography, focusing on the principles and processes governing climate, landforms, and vegetation systems and their interrelationships and will examine natural and human-induced changes to environmental systems. Laboratories will address techniques of measurement, representation and analysis of environmental systems using maps and satellite imagery, laboratory techniques, and field observation. <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*1350</td>
<td>Earth: Hazards and Global Change F,W (3-0)</td>
<td>0.50</td>
<td>This course investigates physical aspects of natural hazards that affect people and society and will focus on the natural systems and processes that cause climate variability and change, floods, earthquakes, volcanoes, landslides, hurricanes, tornadoes and other natural disasters. <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*2000</td>
<td>Geomorphology F (3-2)</td>
<td>0.50</td>
<td>This course examines the changing relations between society and ecology by focusing on relations of power, including intra- and inter-state structures and processes. Environmental movements, conflicts, identities and values are considered along with localization and globalization. Particular attention is paid to ecological and development processes and strategies in the developing world. <strong>Prerequisite(s):</strong> 1 of ENGL<em>1100, ENVS</em>1050, ENVS<em>1060, GEOG</em>1300, GEOG<em>1350, GEOG</em>150, GEOG*1100 <strong>Restrictions:</strong> This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*2030</td>
<td>Environment and Development F (3-0)</td>
<td>0.50</td>
<td>This course examines the changing relations between society and ecology by focusing on relations of power, including intra- and inter-state structures and processes. Environmental movements, conflicts, identities and values are considered along with localization and globalization. Particular attention is paid to ecological and development processes and strategies in the developing world. <strong>Prerequisite(s):</strong> 4.00 credits, GEOG*1220 is recommended <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*2110</td>
<td>Climate and the Biophysical Environment W (3-1)</td>
<td>0.50</td>
<td>The interrelationships between the atmosphere, lithosphere, hydrosphere, and biosphere to produce distinct physical landscapes (climates, soils, vegetation). Emphasis on the role of climate and the flows of energy, water, and biogeochemicals. <strong>Prerequisite(s):</strong> GEOG<em>1300 or GEOG</em>1350 <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*2210</td>
<td>Environment and Resources W (3-0)</td>
<td>0.50</td>
<td>This course examines the interrelationships between people and biophysical processes. The main themes are: 1) characteristics of natural resources and processes through which they are developed and used and 2) human response to environmental conditions, including natural hazards and global change. Contemporary Canadian case studies will be presented at the regional and national scales. <strong>Offering(s):</strong> Also offered through Distance Education format. <strong>Prerequisite(s):</strong> GEOG*1220 is recommended <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*2230</td>
<td>Commodity Chains and Cultures of Consumption F (3-0)</td>
<td>0.50</td>
<td>An introduction to the spatial distribution of economic activity. The course examines patterns, processes and problems in extractive activities, manufacturing, marketing and the service sector, including the transportation of commodities and people. The principles of economic location are applied to regional economic analysis and development. <strong>Prerequisite(s):</strong> GEOG<em>1200 or GEOG</em>1220 <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*2260</td>
<td>Applied Human Geography F (3-2)</td>
<td>0.50</td>
<td>This course introduces students to the geographical research process, guiding them through key methodological issues and techniques in human geography. The lab component of the course focuses on data collection using secondary documents, surveys, interviews, and participant observation, as well as both quantitative and qualitative analysis techniques. Lab assignments and class illustrations draw on a range of topics in human geography. <strong>Prerequisite(s):</strong> GEOG<em>1200 or (ANTH</em>1150 and GEOG*1220) <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*2420</td>
<td>The Earth From Space F (3-3)</td>
<td>0.50</td>
<td>This course provides an introduction to the principles and techniques of air photo and satellite image interpretation. Topics include stereoscopic viewing, parallax, flightline planning, and mapping from air photos. Lab exercises focus on specific applications in natural habitats and in rural and urban settings. <strong>Prerequisite(s):</strong> 0.50 credits in geography and/or earth science <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*2460</td>
<td>Analysis in Geography F (3-2)</td>
<td>0.50</td>
<td>The application of modern techniques to geographic study. The interpretation of geographic phenomena by objective methods. Major honour's students in Geography must complete this course by the end of semester 4. <strong>Prerequisite(s):</strong> 0.50 credits at the 1000 level in Geography <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*2480</td>
<td>Mapping and GIS F,W (3-2)</td>
<td>0.50</td>
<td>An introduction to the theory and techniques of manipulating and displaying spatial data in a GIS (Geographic Information System). Mapping concepts such as scale, co-ordinate systems, map projections, symbolization and vector data encoding are introduced. Major honour's students in Geography must complete this course by the end of semester 4. <strong>Prerequisite(s):</strong> 5.00 credits <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*2510</td>
<td>Canada: A Regional Synthesis W (3-0)</td>
<td>0.50</td>
<td>This course is designed to provide a better understanding of the nature and basis of Canadian regionalism. The first section of the course stresses the biophysical base and the inequality of the natural resource endowment. The historical geographic approach and the systematic overviews of contemporary Canada stress respectively the development and nature of the Canadian space-economy. The final section on regions, regionalism and nationalism provides an overview of the heartland-hinterland dichotomy and centrifugal and centripetal forces operative in the nation. <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*3000</td>
<td>Fluvial Processes F (3-2)</td>
<td>0.50</td>
<td>This course examines processes and landforms associated with rivers. Particular emphasis is placed on the interaction between water and sediment movement and channel morphology. Case studies of human impact on river systems are presented. <strong>Prerequisite(s):</strong> GEOG<em>2000, (GEOG</em>2460 or STAT*2040) <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
<tr>
<td>GEOG*3020</td>
<td>Global Environmental Change S,F (3-0)</td>
<td>0.50</td>
<td>Major global environmental issues examined include climate change, deforestation, desertification and global fisheries. This course is interdisciplinary, exploring the interactions of bio-physical processes with human socio-economic dynamics, including policy initiatives. Particular attention is given to global climate change, its causes, its nature and extent, its implications for ecosystems and societies, and its governance implications. <strong>Offering(s):</strong> Also offered through Distance Education format. <strong>Prerequisite(s):</strong> 7.50 credits <strong>Department(s):</strong> Department of Geography, Environment and Geomatics</td>
</tr>
</tbody>
</table>

---

Last Revision: July 4, 2019

2019-2020 Undergraduate Calendar
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester(s)</th>
<th>Offerings</th>
<th>Prerequisite(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG*2030</td>
<td>Development and the City W (3-0) [0.50]</td>
<td>F,W</td>
<td>Department(s): Geography, Environment and Geomatics</td>
<td>GEOG<em>2030 or GEOG</em>2260</td>
<td>Offerings: Also offered through Distance Education format.</td>
</tr>
<tr>
<td>GEOG*2260</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG*2420</td>
<td>GIS and Spatial Analysis F,W (2-3) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG*3320</td>
<td>Food Systems: Issues in Security and Sustainability F (3-0) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG*3420</td>
<td>Remote Sensing of the Environment W (2-3) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG*3480</td>
<td>GIS and Spatial Analysis F,W (2-3) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG*3490</td>
<td>Tourism and Environment W (3-0) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisite(s)</td>
<td>Department(s)</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
<td>-----------------------------------------------------</td>
<td>---------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>GEOG*4390</td>
<td>Seminar in Rural Geography W (3-0) [0.50]</td>
<td></td>
<td>GEOG<em>2260, GEOG</em>3320</td>
<td>Department of Geography, Environment and Geomatics</td>
<td></td>
</tr>
<tr>
<td>GEOG*4480</td>
<td>Applied Geomatics W (3-6) [1.00]</td>
<td></td>
<td>GEOG*3480</td>
<td>Department of Geography, Environment and Geomatics</td>
<td></td>
</tr>
<tr>
<td>GEOG*4690</td>
<td>Geography Field Research F (3-6) [1.00]</td>
<td></td>
<td>12.50 credits</td>
<td>Department of Geography, Environment and Geomatics</td>
<td></td>
</tr>
<tr>
<td>GEOG*4880</td>
<td>Contemporary Geographic Thought W (3-0) [0.50]</td>
<td></td>
<td>Restricted to major honours students in Geography at semester 6 or above.</td>
<td>Department of Geography, Environment and Geomatics</td>
<td></td>
</tr>
<tr>
<td>GEOG*4990</td>
<td>Independent Study in Geography S,F,W (0-3) [0.50]</td>
<td></td>
<td>Restricted to majors in Environmental Geomatics (Co-op) or Environmental Geoscience and Geomatics, Environmental Governance, Geography and B.Sc.(Env.) students with an overall average of at least 70% at the time of registration. Instructor consent required.</td>
<td>Department of Geography, Environment and Geomatics</td>
<td></td>
</tr>
</tbody>
</table>
### German Studies

**School of Languages and Literatures**

**NOTE:** The School reserves the right to determine the appropriate level to be taken by students enrolling in language courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Department(S)</th>
<th>Prerequisite(s)</th>
<th>Co-requisite(s)</th>
<th>Restricitions</th>
<th>Offering(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM*1100</td>
<td>Introductory German I F,W (2-2) [0.50]</td>
<td>School of Languages and Literatures</td>
<td>GERM*1100</td>
<td></td>
<td></td>
<td>Offered through Distance Education format.</td>
<td>This is a foundational course in German. Students will attain a basic knowledge of the language and practice all four language skills (listening, speaking, reading and writing). They will also learn about aspects of German culture. This course may not normally be taken by anyone who has Grade 12U German.</td>
</tr>
<tr>
<td>GERM*1110</td>
<td>Introductory German II W (3-1) [0.50]</td>
<td>School of Languages and Literatures</td>
<td>GERM*1110</td>
<td></td>
<td></td>
<td>Prevented to be taken by anyone who has Grade 12U German.</td>
<td>This course provides for an intensification of the four language skills introduced in GERM*1100. Students will attain a grasp of essential grammatical concepts and the ability to converse comfortably in everyday situations. This course may not normally be taken by anyone who has Grade 12U German.</td>
</tr>
<tr>
<td>GERM*2010</td>
<td>Intermediate Language Practice F (2-0) [0.50]</td>
<td>School of Languages and Literatures</td>
<td>GERM*2490</td>
<td></td>
<td></td>
<td>Offered in even-numbered years.</td>
<td>This course provides further practice in the four skills and in the application of grammatical concepts.</td>
</tr>
<tr>
<td>GERM*2490</td>
<td>Intermediate German F (4-0) [0.50]</td>
<td>School of Languages and Literatures</td>
<td>GERM*2500</td>
<td></td>
<td></td>
<td>Offered in even-numbered years.</td>
<td>This course completes the introduction of grammatical concepts. It includes systematic oral and written practice and discussion of texts.</td>
</tr>
<tr>
<td>GERM*3000</td>
<td>Narratives of Migration W (2-0) [0.50]</td>
<td>School of Languages and Literatures</td>
<td>12U German or GERM*1110</td>
<td></td>
<td></td>
<td>Offered in even-numbered years.</td>
<td>This course provides a deeper focus and additional examples on the topic of HUMN*3000 as relating to German-speaking countries. It also involves further oral and written practice in the German language. Texts will be read in German.</td>
</tr>
<tr>
<td>GERM*3020</td>
<td>Myth and Fairy Tales in Germany F (1-0) [0.50]</td>
<td>School of Languages and Literatures</td>
<td>GERM*2010 or 2.50 credits in German</td>
<td></td>
<td></td>
<td>Offered in even-numbered years.</td>
<td>The course explores the role of mythology, fairy tales and legends in German literature and culture. Topics may include the formation of a national identity, the allegorical fairy tale and its role in Romanticism, women and the fairy tale, the fairy tale and the socialization of children (incl. Disney), adaptations of mythology in modern literature. Authors may include Goethe, Brothers Grimm, ETA Hoffmann. Lectures and texts are in English. Students registered in GERM<em>3020 will meet a fourth hour per week to discuss texts in German. This course is offered in conjunction with HUMN</em>3020.</td>
</tr>
<tr>
<td>GERM*3470</td>
<td>Holocaust &amp; WWII in German Lit. &amp; Film F (1-0) [0.50]</td>
<td>School of Languages and Literatures</td>
<td>GERM*2010 or 2.50 credits in GERM</td>
<td>HUMN*3470</td>
<td></td>
<td>Offered in odd-numbered years.</td>
<td>This course focuses on texts and films pertaining to World War II and the Holocaust, the development of the thoughts and the language of genocide, and the representation of the Holocaust in literature and films. The objective is to gain an understanding of the ideas and emotions underlying ethnocentrism and anti-Semitism, and to consider artistic responses to the experience of persecution and mass-murder. Lectures and discussions are in English. Students registered in GERM<em>3470 will meet a four hour per week to discuss texts in German. This course is offered in conjunction with HUMN</em>3470.</td>
</tr>
<tr>
<td>GERM*3600</td>
<td>Directed Readings in German Studies U (3-0) [0.50]</td>
<td>School of Languages and Literatures</td>
<td>GERM*2010 or 2.50 credits in GERM</td>
<td>HUMN*3470</td>
<td></td>
<td>A reading course designed according to the program and interest of the individual student.</td>
<td>A reading course on some approved topic in German language or literature, leading to an end-of-term research paper.</td>
</tr>
<tr>
<td>GERM*3700</td>
<td>Experiential Learning and Language S,F,W (0-0) [0.50]</td>
<td>School of Languages and Literatures</td>
<td>GERM*1100</td>
<td></td>
<td></td>
<td>Offered in even-numbered years.</td>
<td>This course provides an opportunity for independent study based on an experiential project in German. The project (approximately 70 hours) must be approved by a faculty member in the School of Languages and Literatures. It will include research about experiential learning, a reflective piece of writing and a public oral presentation about the project.</td>
</tr>
<tr>
<td>GERM*4940</td>
<td>Research Paper in German Studies U (3-0) [0.50]</td>
<td>School of Languages and Literatures</td>
<td>GERM*1100</td>
<td></td>
<td></td>
<td>Offered in even-numbered years.</td>
<td>A reading course on some approved topic in German language or literature, leading to an end-of-term research paper.</td>
</tr>
</tbody>
</table>

**2019-2020 Undergraduate Calendar**

_Last Revision: July 4, 2019_
# Greek

**School of Languages and Literatures**

**NOTES:** Literary texts are, at all levels, studied in the original language. Students registering in these courses will be expected to have the appropriate knowledge. Higher level courses in Greek are available as language modules attached to selected Classical Studies courses. (See Classical Studies course descriptions.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
<th>Prerequisite(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREK*1100</td>
<td>Preliminary Greek I W (3-0) [0.50]</td>
<td></td>
<td>This is a beginner course in Greek, providing the fundamentals of structure and idiom. (This course may not be taken by anyone who has 3U Greek).</td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>GREK*1110</td>
<td>Preliminary Greek II F (3-0) [0.50]</td>
<td></td>
<td>A continuation of GREK*1100.</td>
<td>GREK*1100 or 4U Greek</td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>GREK*2020</td>
<td>Greek Language and Culture W (3-0) [0.50]</td>
<td></td>
<td>Consolidation of fundamental morphology and syntax acquired in GREK<em>1100 and GREK</em>1110. Intensive reading in texts that also illuminate aspects of Greek culture.</td>
<td>GREK*1110</td>
<td>School of Languages and Literatures</td>
</tr>
</tbody>
</table>
### History

**Department of History**

Students wishing to take a 3000 level course must have pass standing in at least 7.50 university credits.

Students wishing to take a 4000 level course must have pass standing in at least 10.00 credits. Access to all 4000 level courses is restricted to students in the B.A. Honours program with a minimum 70% average in all history course attempts.

Students should note the prerequisite requirements for upper level courses in planning their individual programs.

Content of individual courses may vary depending on the instructor; students therefore should check course outlines at the time of course selection.

Courses marked (H) are honors courses. Students in a general program wishing to take these must obtain the permission of instructors concerned.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Offering(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST*1010 Early Modern Europe S,F,W (3-0) [0.50]</td>
<td>This course will deal with the evolution and expansion of European society during the pre-industrial era. Concluding with the Renaissance and Reformation it will survey such themes as the voyages of exploration, the impact of western culture on indigenous societies, the development of commercial capitalism, the transformation of science and technology and the conflict between imperial powers in Europe and overseas.</td>
<td>Also offered through Distance Education format.</td>
</tr>
<tr>
<td>HIST*1050 Invitation to History F,W (3-0) [0.50]</td>
<td>This course introduces students to the basics of the historian's craft, including interpreting primary sources, locating and critically analyzing secondary sources, and writing for history. For more detail on the content of sections consult the History department website.</td>
<td>This is a Priority Access Course. Enrolment may be restricted to participants and specializations during certain periods. Please see the departmental website for more information.</td>
</tr>
<tr>
<td>HIST*1150 The Modern World F,W (3-0) [0.50]</td>
<td>This course is a survey of the twentieth century, focusing on major events and themes such as: the First and Second World Wars, the Great Depression, the rise and fall of fascism, social movements, revolutions, genocides, decolonization, nationalism, the Cold War, and the rise and decline of American power. The course draws its examples and case studies mainly from regions across the world, with the intention of broadening critical awareness and fostering global citizenship. (C)</td>
<td>Department(s): Department of History</td>
</tr>
<tr>
<td>HIST*1250 Science and Technology in a Global Context F,W (3-0) [0.50]</td>
<td>This course is an introduction to the culturally specific ways in which science and technology have developed historically from the ancient period through the twenty-first century. Emphasis will be placed on patterns in which scientific knowledge and practices have traveled and been constructed across cultures and the interconnected but distinct histories of science and technology.</td>
<td>Restriction(s): ASCI*1000</td>
</tr>
<tr>
<td>HIST*2000 The British Isles, 1066-1603 F (3-0) [0.50]</td>
<td>A comparative survey of the histories of England, Scotland, Ireland and Wales during the Medieval and Early Modern eras. Stress will be placed upon common themes such as institutional development, warfare and the often violent interaction between the English and the Celtic peoples.</td>
<td>Department(s): Department of History</td>
</tr>
<tr>
<td>HIST*2020 Film as History W (2-1) [0.50]</td>
<td>This course will consider film both as a source and as a comment on the past. Topics will vary depending on instructor expertise, and may include film as propaganda, the city in film, film as myth, women and gender in film, film and war.</td>
<td>Prerequisite(s): 2.00 credits</td>
</tr>
<tr>
<td>HIST*2040 War and Society W (3-0) [0.50]</td>
<td>Concentrating on developments following the introduction of gunpowder, the course will consider the evolution of military strategy and tactics, the impact of technology on warfare, and the relationship between war and civilian populations.</td>
<td>Offering(s): Also offered through Distance Education format.</td>
</tr>
</tbody>
</table>

### Wesleyan College

**Department of History**

**Asociation**

A wide-ranging look at the diverse religions of the world including Hinduism, Buddhism, Judaism, Christianity, and Islam. The course focuses on each faith's social context and interactions from their beginnings to the present day.

**Offering(s):** Offered through Distance Education format only.

**Prerequisite(s):** 2.00 credits

**Department(s):** Department of History

**HIST*2090 Indigenous Peoples of the Americas W (3-0) [0.50]**

This course covers selected events and issues in Indigenous history in the Americas, including topics such as origin narratives, self-governance, intertribal contact, transatlantic trade, treaty-making, stages of colonization, Indigenous rights and Indigenous protest movements. Themes may focus on specific regions of the Americas and may be examined through notable Indigenous figures, law and policy, technology, food, material culture, or moments of conflict.

**Prerequisite(s):** 2.00 credits

**Department(s):** Department of History

**HIST*2100 Pre-Confederation Canada F (3-0) [0.50]**

This course studies selected events and issues in pre-Confederation Canadian history including political, economic, social, and cultural developments.

**Prerequisite(s):** 2.00 credits, including 0.50 credits in History at the 1000 level

**Department(s):** Department of History

**HIST*2120 Animals and Society W (3-0) [0.50]**

This course provides a historical survey of modern human-animal relationships and the contradictions that characterize them. Topics may include: hunting and sporting, horses and 19th century cities, natural history and the zoo, history of veterinary medicine, 20th century animal sports, the birth of industrial animal agriculture, animals as biotechnology, anti-cruelty movements, petkeeping and consumerism, animal figures in popular culture. The thematic or geographic focus of the course may vary according to the expertise of the instructor.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** 2.00 credits

**Department(s):** Department of History

**HIST*2130 Modern Sport – A Global History F (3-0) [0.50]**

Few activities lend themselves more powerfully to global histories of the modern world than sport. Since the mid-late nineteenth century, organized games have become integral parts of mass culture and everyday life around the world, reflecting and sometimes shaping much wider political and socio-economic processes. Encompassing key themes in the history of the modern world – such as race, empire, gender, mass media, and nationalism – this course critically analyzes the development of modern sport from a global perspective.

**Offering(s):** Offered in even-numbered years.

**Prerequisite(s):** 2.00 credits

**Department(s):** Department of History

**HIST*2190 Celtic Ireland and Britain in the Early Middle Ages W (3-0) [0.50]**

This course will explore the Celts of Ireland and Britain from the time of the druids to the post-millennium emergence of literature relating to a king called Arthur. Reflecting on what we know of the Celts, how we know it, and what the term means, the course will examine topics such as the development of kingdoms and elite 'heroic' culture, the spread of Christianity, the law, everyday life and the family, art and literature, and the interaction between the Celts and their neighbours.

**Prerequisite(s):** 2.00 credits

**Department(s):** Department of History

**HIST*2200 The Medieval World F (3-0) [0.50]**

The major events and developments in Europe, north Africa and Western Asia from the fall of the Roman Empire to 1500 a.d. Emphasis will be placed on the evolution of western Christianity, the rise and expansion of Islam, the emergence of the University, and the growth of literacy and print culture culminating in the humanist movement of the late Middle Ages.

**Prerequisite(s):** 2.00 credits

**Department(s):** Department of History
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST*2220</td>
<td>Buying and Selling: Consumer Cultures S (3-0) [0.50]</td>
<td></td>
<td></td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2240</td>
<td>Women, War and Nation F (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2250</td>
<td>Environment and History W (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2260</td>
<td>Post-Confederation Canada W (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2280</td>
<td>Hockey in Canadian History S (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2300</td>
<td>The United States Since 1776 F (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2340</td>
<td>Slavery and Migrations in the Atlantic World, 1500-1850 W (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2450</td>
<td>The Practising Historian F (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits, including 0.50 credits in History at the 1000 level</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2500</td>
<td>Britain Since 1603 U (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2510</td>
<td>Modern Europe Since 1789 F (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2600</td>
<td>Post-Confederation Canada W (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2820</td>
<td>Modern France Since 1750 U (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2850</td>
<td>Ancient Greece and Rome W (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2890</td>
<td>Early Islamic World F (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2910</td>
<td>Modern Asia W (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2920</td>
<td>Republican Latin America W (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
<tr>
<td>HIST*2930</td>
<td>Women and Cultural Change F (3-0) [0.50]</td>
<td></td>
<td>Prerequisite(s): 2.00 credits</td>
<td>Department of History</td>
</tr>
</tbody>
</table>
HIST*3020 Sexuality and Gender in History F (3-0) [0.50]
This course provides an introduction to the issues of sexuality and gender within history. The course will enable students to develop an understanding of how issues of masculinity, femininity, and sexuality were developed and defined across cultures. The chronological and geographic focus of the course may vary according to the interests and expertise of the instructor.
Prerequisite(s): 7.50 credits including 1.00 credits in History
Department(s): Department of History

HIST*3070 Modern India W (3-0) [0.50]
This course studies the history of modern India from 1757 to the present day. Topics include: European and British imperialism in India, Indian reactions to imperialism, socio-religious movements, the birth of nationalism and the nation-state in India, civil society and social issues in a developing nation, regionalism, foreign policy and India's place in the 21st century.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3080 United States in the World F (3-0) [0.50]
This course is a study of the United States as a global phenomenon. Thematic topics will go beyond foreign policy and military history to include imperialism, immigration, globalization, race, gender, ethnicity, consumption, tourism, and international cultural industries.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3100 Popular Culture and Punishment, 1700-1900 S,F (3-0) [0.50]
The course will survey the social, political and intellectual influences upon the leisure activities of Europeans and Americans in the period with special reference to institutions such as the prison, the asylum, the reformatory and the regulation of popular culture and leisure activities. Witchcraft and the witch-hunt will be discussed.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 7.50 credits including (HIST*1010 or SOC*1500)
Department(s): Department of History

HIST*3140 Witch-hunts and Popular Culture S,F (3-0) [0.50]
This course will explore the phenomenon of the 'witch-hunts' in early modern Europe through a focus on Scotland in the period 1560-1700. In addition to placing the witch-hunts in their historical context by providing students with the background to Scotland's political, religious, and social history in the early modern period, the course will introduce students to the considerable body of historical writing on the subject of the witch-hunts and give them hands on experience with primary source documents in order to discuss specific witch trials themselves. Popular and elite conceptions of witchcraft will be explored, as well as gender history.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 7.50 credits including 1.00 credits in History
Department(s): Department of History

HIST*3150 History and Culture of Mexico U (3-0) [0.50]
This course will cover the history and culture of Mexico from its Precolumbian civilizations to the present. Topics may include: Aztec and Mayan civilizations, European discovery and conquest, inquisition, convents, independence, the Mexican revolution, indigenismo, NAFTA and Zapatista insurgency in Chiapas.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3160 Canadian Political History U (3-0) [0.50]
This course consists of a detailed study of the background and development of the Canadian political process and culture. It devotes special attention to the changing role and character of the state.
Prerequisite(s): 7.50 credits including (1 of HIST*2100, HIST*2600 or HIST*2601/2, POLS*1400, POLS*2300)
Department(s): Department of History

HIST*3180 Canada Since 1945 U (3-0) [0.50]
This course provides an in-depth examination of political, social, cultural, and economic changes in Canada since the Second World War. Particular attention will be paid to the increased diversity of the Canadian population, the development of Canadian institutions, and the changing role played by Canada in the world.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3200 Youth in History F (3-0) [0.50]
This course examines the social history of childhood, youth and adolescence in western culture and how life-cycles vary as a function of class, race and ethnicity, gender and sexuality. It will examine the experiences of young people in different historical eras. Questions to be explored include: Does the notion of adolescence transcend history and culture? How have experts constructed institutions such as the high school, the juvenile justice system, the media, medical and social scientific research to channel youth rebellion? Historical case studies will be selected to show generations in political, community and domestic conflict. This interdisciplinary history course draws upon sociology, anthropology, cultural studies, art, music, literature, academic writing and research from Europe, Canada and the United States.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3230 Spain and Portugal, 1085 to 1668 F (3-0) [0.50]
The course examines the history of Spain and Portugal from the period of the reconquest to overseas expansion. The course covers the political, diplomatic, religious and cultural development of early modern Spain and Portugal and the rise of the overseas empire.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3240 Food History F (3-0) [0.50]
This course will examine the history of food and foodways from the early 19th century to the present. It will explore the impact of changing agricultural practices and the growth of the food processing industry, including the rise of nutritional science, and the impact on eating patterns.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3260 Cinema and the Moving Image F (3-0) [0.50]
This course provides a historical survey of cinema and the moving image, as well as the material, cultural, political and technological contexts of their production. Students will come to understand the broad development of the medium over the past one hundred and thirty years, beginning with early, pre-cinematic moving image technologies and ending with an analysis of the influence of other media and merchandizing on cinema. Students will also become familiar with crucial terminology for analyzing and writing about how films have been constructed and how they communicated to audiences over time. Geographical or thematic focus may vary according to the expertise of the instructor.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3270 Revolution in the Modern World W (3-0) [0.50]
This course offers a comparative analysis of revolutionary movements in the modern world. It focuses on the French Revolution, the development of a revolutionary tradition in the 19th century, the Russian Revolution, and the Communist Revolution in China. Comparative themes include the relative importance of ideology and class conflict, the emergence of professional revolutionaries, and the relationship between revolutions and international relations.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3310 Disease and History U (2-0) [0.50]
This interdisciplinary course provides an introduction to the historical interactions between disease and human society from the Middle Ages to the present. Major themes may include the co-construction of disease and society; disease and urbanization; disease and colonialism; disease and globalization; disease and gender.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3320 Modern China F (3-0) [0.50]
This course examines the history and culture of China since the nineteenth century. Topics may include economics, gender, imperialism, militarism, politics, and religion.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3330 The Scottish Diaspora W (3-0) [0.50]
The course offers a comprehensive overview of Scottish Diaspora history, focusing on a broad range of themes and settlement locations. Covering the period c.1750 to 1945, the historical geographies of the Scottish Diaspora explored include the ‘near Diaspora’ of England, Wales and Ireland; Continental Europe; the traditional settler Dominions; the United States; Africa; and Asia.
Prerequisite(s): 7.50 credits
Department(s): Department of History
XII. Course Descriptions, History

HIST*3350 Modern Germany U (3-0) [0.50]
This course will be devoted to a study of major themes in modern German history, and to an analysis of Germany's role in post-war Europe. Topics include the unification of Germany, the role of nationalism in modern German history, the significance of the Bismarck era, the rise of Hitler and the development of the two Germanies until their unification in 1990.
Prerequisite(s): 7.50 credits
Restriction(s): HIST*2830.
Department(s): Department of History

HIST*3360 History and Culture of Brazil W (3-0) [0.50]
This course will cover the history and culture of Brazil from its early indigenous civilizations to the present. Topics may include: European discovery and contact, the colonial era, slave trade and slavery, Dutch occupation, hybrid Afro-Christian religions, the Inquisition, independence, abolitionism, samba and carnival, dictatorships, soccer, favelas, and issues related to race, class, gender and the environment.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3370 Canada and the First World War F (3-0) [0.50]
This course examines Canada's role in the First World War. The question of how much the war was a transformative experience for Canadians will be central to students' learning, as they grapple with issues pertaining to race, ethnicity, class, gender, militarism, pacifism, religion, age, and memory.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3380 British Imperialism in Asia and Africa F (3-0) [0.50]
This course examines the British Empire from the 18th through the 20th centuries. It focuses on: the empire in Asia and Africa; ideologies of empire; and European and non-European approaches and reactions to empire.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3390 Governments and Indigenous Spaces F (3-0) [0.50]
This course examines how colonial and neo-colonial governments interacted with Indigenous societies by restricting social, economic, and cultural activities. It will explore the day-to-day impacts of colonial and neo-colonial governments on Indigenous spaces. Engagement with case studies will deepen student understanding of both bureaucratic violence and Indigenous survivance.
Prerequisite(s): 7.50 credits including (1.00 credits in History or IDEV*2400)
Department(s): Department of History

HIST*3410 Religion in 19th-Century Africa F (3-0) [0.50]
This course will introduce students to the dynamic 19th-century religious landscape of Africa before European colonization, examining the role of Islam and Christianity in the social organization and political transformation of African societies. It will examine how both these religions (in Sudanic, North and Northeast Africa on the one hand) and indigenous religions (in much of southern Africa on the other) intermediated and coloured the character of the encounter between African societies and European colonizers.
Attention will be given to the nature and impact of the Islamic revolutions that broke out across much of Sudanic and Northeast Africa during this period and the intersection between indigenous African religions, missionary Christianity, and the socio-political transformations that swept across much of coastal West and southern Africa.
Prerequisite(s): 7.50 credits including (1 of HIST*1150, HIST*2340, HIST*2960)
Department(s): Department of History

HIST*3440 The Global Sixties F (3-0) [0.50]
This course examines the political, social, and cultural history of one of the most important decades in the twentieth century: the sixties. It adopts global perspectives to ask how and why the sixties mattered in the development of the modern world. A diverse range of themes may be covered, from the political controversies stirred up by the Vietnam War, decolonisation in Africa, Mao's cultural revolution, the Cuban missile crisis, and the upheavals of 1968 to the social changes occasioned by the introduction of the birth control pill, the rise of The Beatles, and the emergence of television.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3450 The Uses of History U (2-1) [0.50]
As an introduction to the use of history outside the classroom, this course discusses public history and memory through the activities of governments, corporations, and voluntary associations. History as political propaganda, marketing strategy, and ideological support in a global and historical context is examined. Discussions will focus on history as presented in films, television, monuments, museums, commemorations, and other public and popular media.
Prerequisite(s): 7.50 credits including HIST*2450
Department(s): Department of History

HIST*3460 Natural Disasters in Global History W (3-0) [0.50]
The history of natural disasters offers insights into how the relationships between human societies and their natural environments have changed over time. Through a series of case studies, the course will trace the evolving history of natural disasters in global context from the late medieval period to the present. The course will address thematic issues including the construction of vulnerable landscapes and societies; the short-term impacts of disasters; changing patterns of disaster relief; and disasters and social change.
Prerequisite(s): 7.50 credits
Restriction(s): HIST*3430
Department(s): Department of History

HIST*3470 Independent Reading U (3-0) [0.50]
A course of independent study, based on a comprehensive reading list provided by the department. Evaluation will be based on two written examinations.
Prerequisite(s): 7.50 credits
Restriction(s): Instructor consent required.
Department(s): Department of History

HIST*3480 Workplace Learning U (0-0) [0.50]
An independent study course based on either History related voluntary or paid work experience. Evaluation will be based on assignments relating to work duties. This will usually be in the form of a weekly journal, and a major project relating to some specific aspect of the work experience. Students interested in this option must have their project approved by the department prior to the semester in which they plan to engage in their work experience. Students will then be assigned to a faculty supervisor who will oversee the project.
Prerequisite(s): 7.50 credits including 1.50 History or equivalent credits
Restriction(s): Instructor consent required.
Department(s): Department of History

HIST*3520 The Vikings: Early Medieval Encounters W (3-0) [0.50]
This course explores the topic of the Vikings in early medieval culture (700 - 1100). The focus will include the role of violence in early medieval society; the construction of the ‘Other’, as well as medieval and modern historiography. It provides students with enhanced knowledge of early medieval Europe, the Byzantine Empire and Russia.
Prerequisite(s): 7.50 credits including (HIST*2000 or HIST*2200)
Department(s): Department of History

HIST*3570 Women in Modern Europe U (3-0) [0.50]
This course will examine selected topics in modern European women's history. Attention will be given to action in the public sphere, women's personal and family lives and occupations.
Prerequisite(s): 7.50 credits including (1 of HIST*2500, HIST*2510, HIST*2800, HIST*2930)
Department(s): Department of History

HIST*3580 Women's History in Asia U (3-0) [0.50]
This course examines the roles of women in one or more countries of Asia through the prisms offered by ideas of 'race', class, gender, social status, material culture, intellectual life, and ideology.
Prerequisite(s): 7.50 credits including (1 of HIST*1150, HIST*2800, HIST*2910, HIST*2930)
Department(s): Department of History

HIST*3590 Ancient & Medieval India U (3-0) [0.50]
This course examines the history of India from the beginnings of civilization on the Indian subcontinent to the end of the Great Mughals in the 18th century. It provides an overview and analysis of the cultural, social, religious, political and economic development of Indian civilization, including development from tribe to state to civil society, political organization, socio-religious movements, cultural contact and exchange, and the development of a composite culture.
Prerequisite(s): 7.50 credits
Department(s): Department of History
HIST*3600 Quebec and French Canada U (3-0) [0.50]
This course examines selected themes in the social, economic, political and cultural evolution of Quebec and its relations with the rest of Canada. The course may also examine the development of French Canadian and Acadian communities in other provinces.
Prerequisite(s): 7.50 credits including (HIST*2600 or POLS*2300)
Department(s): Department of History

HIST*3640 Madness and Psychiatry F (3-0) [0.50]
This course will explore madness and the history of psychiatry in the modern world. Topics may include the development of asylums, wild children and human nature, the rise and fall of hysteria, psychoanalysis, as well as ways in which psychiatry has related to imperialism, racial policies, sexuality, gender, religious beliefs, and war.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3660 Canadian Social History U (2-0) [0.50]
This course examines selected themes in the development of Canadian society such as the role of class, the social consequences of industrialization and urbanization, immigration, ethnicity and religion, education and culture.
Prerequisite(s): 7.50 credits including (HIST*2600 or HIST*2601/2)
Department(s): Department of History

HIST*3690 Darwin, Culture and Society U (2-0) [0.50]
This course will focus on the historical, social, and cultural dimensions of Darwin’s theory of evolution, from the late 18th century to the present. Topics may include: natural history, classification, social Darwinism, race and imperialism, science & religion, science & literature, the eugenics movement, the Scopes trial, the modern evolutionary synthesis, sociobiology, gender, antievolutionism and creationism/intelligent design.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3750 The Reformation U (3-0) [0.50]
The changes in religious, social and cultural life in 16th century Europe will be discussed. This course will examine the impact of humanism, the developments in urban culture known as the Renaissance, the reform movements in central and western Europe, the Catholic response, and the resulting disintegration of the medieval social order.
Prerequisite(s): 7.50 credits including HIST*1010
Department(s): Department of History

HIST*3820 Early Modern France U (3-0) [0.50]
This course surveys French History from the Renaissance to the French Revolution. Students will examine the emergence of the powerful monarchy, 16th-century religious conflict and civil war, and the social, political and intellectual developments of the 17th and 18th centuries, which culminated in the 1789 Revolution.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3830 Modern Middle East W (3-0) [0.50]
This course explores struggles for national independence in the region after 1919, the impact of the developing oil industry, the creation of Israel and the resulting Arab-Israeli conflict, the rise of American influence, the divisiveness of Cold War politics, and the role of women in contemporary Islamic societies.
Prerequisite(s): 7.50 credits including (1 of HIST*2890, HIST*3840, POLS*3060)
Department(s): Department of History

HIST*3840 Ottoman Empire, 1300-1923 W (3-0) [0.50]
This course examines the rise of the Ottoman Empire in the 14th century, both in Europe and the Middle East, and traces its evolution until its demise in the 20th century. Students investigate the historiographical debates surrounding various aspects of writing Ottoman history.
Prerequisite(s): 7.50 credits
Department(s): Department of History

HIST*3910 Religion in Africa Since 1900 W (3-0) [0.50]
This course will examine the intersection of Islam, Christianity, and the colonial and post-colonial experience of Africans and how these religions helped to determine the opportunities for and limits of colonial impact and anti-colonial nationalist activities. It will also examine the role of Islam in North Africa and of Christianity (and to a limited extent of Islam) in much of sub-Saharan Africa in the emergence of a new class of elite through whose leadership modern African nation states emerged after independence. Finally, it will examine the increasingly globalized characteristics of these religions and the pivotal role they have played in the emerging socio-political realities of late 20th and early 21st century Africa.
Prerequisite(s): 7.50 credits including (HIST*1150 or HIST*2340)
Department(s): Department of History

HIST*4010 Gender and Culture W (3-0) [1.00]
This course will examine how masculinity and femininity has been constructed in popular culture using newspapers, magazines, advertisements, films and novels. Careful attention will be paid to the intersections of gender, race and class. In addition to analyzing some outstanding texts in this field, students will have the opportunity to write an original essay on a topic of their choice.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 10.00 credits including 1.50 credits in History at the 3000-level
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4030 Historical Biography U (3-0) [1.00]
This advanced research seminar asks students to consider the role of the individual in history by reading theoretical works and examples drawn from the major schools of thought on this issue. Students will undertake to write a biography that will utilize primary sources and will include a detailed historiographical discussion of the works available on their chosen subject. (H)
Prerequisite(s): 10.00 credits including 1.50 credits in History at the 3000-level
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4040 Topics in Scottish History U (3-0) [1.00]
This is a seminar course dealing with selected aspects of Scottish social, economic and political history. The seminars will be based upon an examination of primary sources from the University library's extensive Scottish Collections, as well as secondary literature. Students should consult with the department for specific offerings. (H)
Prerequisite(s): 10.00 credits including 1.50 credits in History at the 3000-level
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4070 Experiential Learning: Research S,F,W (3-0) [1.00]
This course offers an opportunity for students to independently develop skills in the practice of historical research, such as working with archives, digitization, and database management. Students will work under the supervision of individual faculty members. Students must make arrangements with the faculty advisor well before course selection.
Prerequisite(s): 10.00 credits including 1.50 credits in History at the 3000-level
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4090 Modern European History U (3-0) [1.00]
This course is an in-depth examination of a theme or themes from European history in the nineteenth and/or twentieth centuries. Topics chosen will vary with expertise of the instructor. (H)
Prerequisite(s): 10.00 credits including (1 of HIST*1150, HIST*2510, HIST*3909)
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History
HIST*4100 Africa and the Slave Trades U (3-0) [1.00]
This course will discuss the origins, character, and operation of slavery and the export slave trades in Africa. It will examine the interaction between domestic slavery and the export slave trades, on the one hand, and demographic, political, economic, social and cultural impact on African states and societies, on the other. Other themes to be examined include slave resistance in Africa, abolition and the introduction of legitimate commerce and their impact on Africa. (H)
Prerequisite(s): 10.00 credits including (1 of HIST*2340, HIST*2960, HIST*3410, HIST*3910)
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4120 Topics in Global History U (3-0) [1.00]
This course focuses on issues that emphasize the history of connections between different parts of the world. Topics may include the growth of the world economy; transformations of the global environment; trade and exchange; diasporas and migration. (H)
Prerequisite(s): 10.00 credits including 1.50 credits in History at the 3000-level
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4140 Sexuality in the Middle Ages F (3-0) [1.00]
This course will provide a thematic approach to the foundations of western attitudes towards sex and sexuality as they developed in the European Middle Ages. It will examine the complex interweaving of Greek and Roman medicine, medieval Christian canon law and theology, and Germinic popular beliefs, which together provided the underpinnings of western values and practices pertaining to human sex and sexuality, with enduring results. The course will take an historiographical approach to topics and themes. (H)
Prerequisite(s): 10.00 credits including (1 of HIST*2000, HIST*2200, HIST*3020)
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4160 Seminar in Canadian Political History U (3-0) [1.00]
Political events, key personalities, the political process, and state instruments and institutions will be analyzed with a view to understanding historical aspects of the political system and culture in Canada. (H)
Prerequisite(s): 10.00 credits including (HIST*2600 or HIST*2601/2)
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4170 Exploration of Digital Humanities W (3-0) [1.00]
This course is designed to introduce students to applications of new and inter-disciplinary digital humanities approaches, methodologies and tools, and to explore their application to text, image, sound, map, and other media sources. It will appeal to students in literature, history, fine arts, and music who want an introduction to state-of-the-art digital humanities research. There will be flexibility to accommodate the specific disciplines and interests of the students. (H)
Prerequisite(s): 10.00 credits
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4180 American Identities F (3-0) [1.00]
This course analyzes how Americans have constructed and enacted identities in the U.S. as citizens and consumers through investigating concepts such as ‘race’, ethnicity, gender, sexuality, class, regional distinctions, and nationalism. (H)
Prerequisite(s): 10.00 credits including (HIST*2300 or HIST*2650)
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4200 Health, Mind and Body F (3-0) [1.00]
This is a seminar course which will explore the history of health, the body and the mind. Possible topics include: the history of athletics and physical fitness, the history of disability, the history of nutritional science and advice, the history of women’s health, the history of disease, the history of mental illness, and the history of psychiatry. (H)
Prerequisite(s): 10.00 credits, including 1.50 credits in History at the 3000-level
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4220 Cities and Canadian Culture U (3-0) [1.00]
Reflecting the fact that Canada’s population has been predominantly urban for a century, this seminar explores the role of urban centres in shaping Canadian cultural identity. Particular focus will be placed on the ways that city living and city form have affected the expression of Canadian identity through such topics as spectator sports, uses of public spaces, and metropolitan control of print and broadcast media (H)
Prerequisite(s): 10.00 credits including (HIST*2600 or HIST*2601/2)
Restriction(s): HIST*3220. Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4270 Topics in Modern Asia W (3-0) [1.00]
This course will examine select topics in the development of Asian countries from the 18th to the 21st Century. Select themes including imperialism, nationalism, economics, society, and gender will be examined in a variety of Asian countries. (H)
Prerequisite(s): 10.00 credits including HIST*2910.
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4280 Poverty and Policy in the Victorian Age U (3-0) [1.00]
Starting with the debates over the New Poor Law of 1834, this course will examine the changing content of the notion of poverty, and changing methods adopted to treat it. It will also look at the lives of the poor, in so far as these can be reconstructed from contemporary sources. (H)
Prerequisite(s): 10.00 credits including HIST*2500.
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4450 Life, Death and Migrations F (3-0) [1.00]
This seminar uses quantitative sources and methods to explore such themes as social inequality and demographic experience since 1800. It examines the value of such data for policy purposes, as well as the social and cultural contexts in which surveys are developed and undertaken. Students develop presentational and analytical skills through research projects. (H)
Prerequisite(s): 10.00 credits including HIST*2450, and at least 1.00 credits in History at the 3000 level or above.
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4470 Special History Project Seminar I U (3-0) [0.50]
This course is designed to train honours students in the techniques of research, interpretation and writing of history. The student will choose a topic for intensive study from a list approved by the department. (H)
Prerequisite(s): 10.00 credits
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts. Instructor consent required.
Department(s): Department of History

HIST*4480 The French Revolution U (3-0) [1.00]
This seminar course provides an in-depth analysis of the French Revolution, 1789-1799, and the literature surrounding its interpretation. (H)
Prerequisite(s): 10.00 credits including (1 of HIST*2510, HIST*2820, HIST*3270, HIST*3820)
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4620 Seminar in Canadian Rural History U (3-0) [1.00]
This course will examine selected topics in the social and economic transformation of rural Canada with relevant comparisons to the rest of North America and elsewhere. (H)
Prerequisite(s): 10.00 credits including (HIST*2600 or HIST*2601/2)
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4700 Premodern History U (3-0) [1.00]
This course provides a detailed analysis of selected aspects of the Middle Ages from c. 1000 through the early modern period. Students should consult the department for specific offerings. (H)
Prerequisite(s): 10.00 credits including HIST*2000 or HIST*2200
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History

HIST*4720 Topics in Modern Asia W (3-0) [1.00]
This course will examine select topics in the development of Asian countries from the 18th to the 21st Century. Select themes including imperialism, nationalism, economics, society, and gender will be examined in a variety of Asian countries. (H)
Prerequisite(s): 10.00 credits including HIST*2910.
Restriction(s): Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.
Department(s): Department of History
### HIST*4820 Images, Conflict and Politics in the Middle East F (3-0) [1.00]
A seminar course designed to explore selected aspects of Islamic history and/or historiography. Students should consult the department for specific offerings. (H)

**Prerequisite(s):**
- 10.00 credits, (1 of HIST*2890, HIST*3830, HIST*3840, POLS*3060)

**Restriction(s):**
- Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.

**Department(s):**
- Department of History

### HIST*4970 Special History Project Seminar II U (3-0) [0.50]
A continuation of HIST*4470. (H)

**Prerequisite(s):**
- 10.00 credits

**Restriction(s):**
- Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts. Instructor consent required.

**Department(s):**
- Department of History
Horticultural Science

Department of Plant Agriculture

HORT*1120 Grape and Wine Science W (3-0) [0.50]
This course will examine whole plant physiology as illustrated by the perennial system of a grapevine. Students will investigate all the primary functions of a green plant, with each function then related to a grapevine and how it functions in nature. Each function of the vine will be connected to the ultimate effects on fruit quality and by extension, wine quality throughout the course.
Offering(s): Offered through Distance Education format only.
Restriction(s): HORT*3430. Not acceptable for students in the BSC, BSC(Agr) or BSC(Env) programs.
Department(s): Department of Plant Agriculture

HORT*1130 Science of Gardening F (3-0) [0.50]
This course examines the growth, development and physiology of horticultural species used for food and ornamental aesthetic purposes. The interaction between plants and impact of environmental factors as such as light, temperature, CO2 and humidity on plant processes will be emphasized.
Restriction(s): Not acceptable for students in the BSC, BSC(Agr) or BSC(Env) programs.
Department(s): Department of Plant Agriculture

HORT*2450 Introduction to Turfgrass Science F (3-2) [0.50]
The biology, ecology, adaptation, and uses of cool-season and warm-season turfgrass species and cultivars will be introduced. Topics will include the identification and life strategies of different turfgrass species, principles of reproduction and techniques for establishment of turfgrass by seeding, sprigging and sodding. The ecology of management including mowing, irrigation, cultivation, mineral nutrition, repair and renovation, and management of stresses (thatch, weeds, insects, disease) will be covered. The turfgrass industry will be introduced, including application of ecological principles to athletic field management, sod production, golf course management, and professional lawn care.
Prerequisite(s): BIOL*1040 or [BIOL*1090, (1 of BIOL*1050, BIOL*1070, BIOL*1080)]
Restriction(s): HORT*3220
Department(s): Department of Plant Agriculture

HORT*3010 Annual, Perennial and Indoor Plants - Identification and Use F (2-2) [0.50]
This course focuses on the identification and adaptation of annual, biennial, perennial herbaceous and indoor plants. Lectures will be integrated with outdoor laboratory activities to emphasize utilization of plant groups in park, perennial border, general landscape, botanic garden and interscape settings.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 1 of AGR*2470, LARC*2240, 0.50 credits in botany
Department(s): Department of Plant Agriculture

HORT*3050 Management of Turfgrass Insect Pests and Weeds F (3-2) [0.50]
Biology, behavior and impact of insect pests of turfgrass and recognition of symptoms will be emphasized. Identification and management of weed species commonly found in turfgrass will be discussed. Environmental impacts of cultural and chemical control techniques will be discussed for each group of pests and advances in chemical and biological control methods will be developed.
Prerequisite(s): HORT*2450
Restriction(s): DTM*3300
Department(s): Department of Plant Agriculture

HORT*3150 Principles and Applications of Plant Propagation F (2-2) [0.50]
Plant propagation is the art and science of multiplication of plant material involving the application of the principles of plant growth and development and the techniques of mass production. This course will explore biological, commercial, environmental, and social dimensions of plant propagation systems with emphasis on global trends in the plant production industry.
Prerequisite(s): AGR*2470 or BOT*2100
Restriction(s): HORT*3230, HORT*3350
Department(s): Department of Plant Agriculture

HORT*3270 Medicinal Plants W (3-0) [0.50]
This course will focus on the application of recent biotechnology advances to elucidate the physiology, biochemistry, and conservation biology of medicinal plants for enhancing their efficacy in preventing and curing human disease.
Prerequisite(s): 1 of BIOL*1050, BIOL*1070, BIOL*1080, BIOL*1090
Department(s): Department of Plant Agriculture

HORT*3280 Greenhouse Production W (3-3) [0.50]
This course examines the principles and practices of production, culture and marketing of greenhouse flower and vegetable crops.
Prerequisite(s): 1 of AGR*2050, AGR*2470, BOT*2100
Department(s): Department of Plant Agriculture

HORT*3310 Plants, Food and Health F (3-0) [0.50]
This course will provide an in-depth understanding of plants grown for food, spices and grains as they relate to humans in terms of disease prevention and health. Plants and their familial characteristics, the metabolic pathways characteristic to specific food types, and their effects on human physiology will be discussed. The topic will be introduced in the context of world food habits, plants as food and hot spots of healthy populations and their food customs.
Prerequisite(s): BIOL*2580
Department(s): Department of Plant Agriculture

HORT*3340 Wine-Grape Culture W (3-0) [0.50]
The history and impact of grape-growing in the New World will be presented and studied. Grape (Vitis) taxonomy (ameloploidy) and physiology will be studied as it relates to the Old World/New World wine growing. The physiology of fruiting and vegetative balance for managing wine quality in the vineyard will be studied in detail, especially as it pertains to cool climate and northern limit grape growing for premium wine quality. End product management and wine regions of the world will be examined.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 1 of AGR*2470 or BOT*2100
Department(s): Department of Plant Agriculture

HORT*3510 Vegetable Production F (3-3) [0.50]
The principles of vegetable production will be studied in terms of sustainable crop management and the impact of biotic and abiotic factors will be discussed. Consideration will also be given to storage processing and marketing.
Prerequisite(s): 1 of AGR*2050, AGR*2470, BOT*2100
Department(s): Department of Plant Agriculture

HORT*4200 Plants, the Environment and Society W (3-0) [0.50]
The course will explore the environmental impact of plants in urban and rural landscapes and society's perception of the how those areas should be used. Emphasis will be placed on the ecology of managed landscapes and issues surrounding society's perception of management practices. The impact of public perception about the management and environmental impact of plants in urban and rural landscapes will be discussed, including the issues surrounding the use and maintenance of managed landscapes ecosystems.
Prerequisite(s): (1 of AGR*2470, BOT*2100, ENV*2330, LARC*2240)
Department(s): Department of Plant Agriculture

HORT*4300 Postharvest Physiology W (3-3) [0.50]
This course provides an examination and discussion of physiological and biochemical processes unique to postharvest development and deterioration. Principles and practices of storing fruits, vegetables, and florists’ and nursery stocks as well as marketing pathways for horticultural crops will be considered.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): AGR*2470
Department(s): Department of Plant Agriculture

HORT*4380 Tropical and Sub-Tropical Crops F (3-0) [0.50]
This course examines the production and utilization of tropical and sub-tropical crops in farming systems.
Offering(s): Offered in even-numbered years.
Prerequisite(s): 1 of AGR*2470, BOT*2100, (AGR*2050, AGR*2150)
Department(s): Department of Plant Agriculture

HORT*4420 Fruit Crops F (3-3) [0.50]
Growth patterns, fruiting characteristics and adaptation to environmental conditions of fruit crops in temperate regions will be presented. Classification, cultural practices including propagation and the physiological principles underlying these practices will be emphasized.
Prerequisite(s): 1 of AGR*2050, AGR*2470, BOT*2100
Department(s): Department of Plant Agriculture
HORT*4450 Advanced Turfgrass Science W (3-2) [0.50]

This course emphasizes on plant stressors and physiological responses of plants to stress. Interactions between the soil system, the plant and the environment are considered, with focus on how soil physical, chemical and biological properties as well as environmental factors affect turfgrass plant health and physiology. Principles and strategies of biological control, cultural practices that affect plant health, pest life cycles and pest population levels are addressed in order to develop integrated management plans for turf aimed at reducing pest levels in an environmentally benign manner.

Prerequisite(s): AGR*2050 or AGR*2470

Department(s): Department of Plant Agriculture
XII. Course Descriptions, Hospitality and Tourism Management

Hospitality and Tourism Management

School of Hospitality, Food and Tourism Management.

HTM*1070 Responsible Tourism Policy and Planning F (3-0) [0.50]
This course focuses on the various aspects of tourism policy, planning and development with a heavy emphasis on responsible choices. Tourism is reviewed in a global context and its role, both positive and negative, in socio-economic development, poverty alleviation, climate change, and other topics of current importance are explored.

Restriction(s): HTM*2170 This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations during certain periods. Please see the department for more information.

Department(s): School of Hospitality, Food and Tourism Management

HTM*1160 Lodging Operations W (3-0) [0.50]
This course introduces the lodging industry with the inclusion of terminology, organizational structures, and departmental responsibilities. The current global structure of the lodging environment including an analysis of major organizations and forecasts, the future of lodging with a reliance on a critical analysis of existing studies, consulting reports, and up-to-date lodging news is covered. Decision-making from the role of a lodging manager is investigated with a focus on safety, security, profitability, and ethical management.

Restriction(s): HTM*2100 This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations during certain periods. Please see the department for more information.

Department(s): School of Hospitality, Food and Tourism Management

HTM*1700 Foodservice Management F (3-0) [0.50]
This course introduces students to the many facets of the foodservice industry in Canada. Emphasis will be placed on three areas of study; the foodservice industry and organizations, how foodservice relates to greater food systems and how issues in these areas affect the industry.

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations during certain periods. Please see the department for more information.

Department(s): School of Hospitality, Food and Tourism Management

HTM*2010 Hospitality and Tourism Business Communications F,W (3-0) [0.50]
This course is designed to enhance students' confidence and professionalism in the hospitality and tourism industry by improving their communication skills. The focus is primarily on writing, but also includes effective speaking and presentation skills. The assignments are based on hospitality and tourism issues.

Prerequisite(s): 4.00 credits

Restriction(s): Restricted to students in BCOMM.HAFA, BCOMM.HAFA:C, BCOMM.HTM, BCOMM.HTM:C or BCOMM.TMGT.

Department(s): School of Hospitality, Food and Tourism Management

HTM*2020 The Business of Sports and Event Tourism W (3-0) [0.50]
This course provides an introduction to the multi-faceted sports and event tourism industry from a business perspective. It focusses on a range of major sporting events such as the Olympics, national and international championships, and their influence on the sport tourism market in Canada. Students will understand components of sport management, event logistics, sponsorship, hospitality and licensing agreements.

Prerequisite(s): 4.00 credits including (MGMT*1000 or MGMT*2150)

Department(s): School of Hospitality, Food and Tourism Management

HTM*2030 Control Systems in the Hospitality Industry F,W (4-0) [0.50]
This is a study of the policies and procedures required to control food, beverage and other products, payroll and other operating costs. Areas examined include such topics as cost behaviour and analysis, menu analysis, budget preparation and the interpretation of data. The course will also stress the application of analytical techniques. Examples from all industry segments will be used.

Offering(s): Also offered through Distance Education format.

Prerequisite(s): 4.00 credits

Restriction(s): Restricted to students in BCOMM.HAFA, BCOMM.HAFA:C, BCOMM.HTM, BCOMM.HTM:C, BCOMM.TMGT or BASC.AHN

Department(s): School of Hospitality, Food and Tourism Management

HTM*2070 Event Management W (3-0) [0.50]
This course takes a holistic approach to the sales, servicing and management of the meetings, events, conventions, exhibitions, and incentive travel industries. Emphasis is placed on both the supply (product and service providers) and demand (meeting and event managers) elements of the industry. The course focuses on the unique operational and managerial functions of a significant sector of the tourism and hospitality industry.

Prerequisite(s): 1 of HTM*1000, HTM*1160, HTM*1700

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

Department(s): School of Hospitality, Food and Tourism Management

HTM*2220 Communication and Media Strategy in Sport and Events F (3-0) [0.50]
All successful communication and media strategies in sport and events must take into account the complexities of this diverse and dynamic market of sport-related goods and services. This course examines sport and event communications through the investigation of internal and external factors that shape consumer demand in related industry sectors with an emphasis on digital media applications. Specifically, it will analyze the social, cultural and economic factors influencing the marketing of products, services and ideas.

Prerequisite(s): HTM*2020, MCS*1000

Restriction(s): This is a Priority Access Course. Restricted to students in BCOMM.SPMT, BCOMM.SPMT:C. Enrolment may be restricted to particular programs or specializations. See department for more information.

Department(s): School of Hospitality, Food and Tourism Management

HTM*2700 Understanding Foods F,W (3-2) [0.50]
This course explores the chemistry behind food preparation, food safety and handling; and the impact of different cooking methods on the colour, flavour and texture of food. Students will apply knowledge by cooking and assessing a series of prepared products.

Restriction(s): This is a Priority Access Course. Restricted to students in BCOMM.HAFA, BCOMM.HAFA:C, BCOMM.HTM, BCOMM.HTM:C, BCOMM.TMGT or BASC.AHN. Enrolment may be restricted to particular programs or specializations. See department for more information.

Department(s): School of Hospitality, Food and Tourism Management

HTM*2740 Cultural Aspects of Food F (3-0) [0.50]
Students are provided with an opportunity to learn about numerous cultural factors that influence food selection, preparation, and consumption patterns. Food history, religions, geographic location and culture are studied to develop an understanding of the impact of these factors on food related behaviours.

Prerequisite(s): 2.00 credits

Department(s): School of Hospitality, Food and Tourism Management

HTM*3020 The Impact of Business on Sport Industry F (3-0) [0.50]
To understand the role of a sports manager, students will apply financial decision making concepts to evaluate the continually evolving sports industry. Students will explore how globalization trends, technological advancements, and demographic changes are impacting the sports industry and their effect on supply, demand, pricing, commercialization, labor policy, and revenue in the sports industry.

Prerequisite(s): 9.00 credits including HTM*2020

Department(s): School of Hospitality, Food and Tourism Management

HTM*3030 Beverage Management F (2-2) [0.50]
Students will examine the beverage industry, including bottled water, energy drinks, coffee, tea and alcoholic beverages. In addition to the laws regulating production, labelling and marketing of these products, the course discusses the active components of beverages and their impact on the human body, consumption risks and recommended uses.

Prerequisite(s): 9.00 credits

Restriction(s): Students must be of legal drinking age in Ontario. This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

Department(s): School of Hospitality, Food and Tourism Management

HTM*3060 Lodging Management F (3-0) [0.50]
This course explores the principles and practices of lodging management and related activities. Students will use a systematic approach to lodging front office operations by detailing the flow of hotel business. Topics include rooms forecasting, reservations, registration, occupancy & revenue management, account settlement, a computer-based property management system (PMS), guest relations, and interdepartmental relationships. The essential internal and external information of lodging properties and the industry will be also overviewed and analyzed through multiple-set of industry performance reports.

Prerequisite(s): 9.00 credits including HTM*2010, (HTM*1160 or HTM*2100)

Department(s): School of Hospitality, Food and Tourism Management
HTM*3080 Marketing Strategy for Hospitality Managers F,W (3-0) [0.50]
This course focuses on major marketing decisions that hospitality managers face in generating and sustaining demand for their products and services through creating value for, and establishing strong relationships with their customers. Course content covers key elements of strategic marketing including, segmentation and target marketing, positioning and branding, pricing, promotions, personal selling, and distribution system decisions within the context of the hospitality and tourism industry.
Prerequisite(s): 9.00 credits including HTM*2010, MCS*1000
Department(s): School of Hospitality, Food and Tourism Management

HTM*3090 Restaurant Operations Management F,W (2-4) [1.00]
This course covers the application of managerial functions to restaurant and foodservice operations with the emphasis on teamwork and the principles of food production and service in a sustainable commercial restaurant setting. Students gain hands-on understanding of scheduling, purchasing, costing, nutritional analysis, and food safety while operating a student run restaurant.
Prerequisite(s): HTM*2030, (HTM*1700 or HTM*2700)
Department(s): School of Hospitality, Food and Tourism Management

HTM*3120 Service Operations Analysis F,W (3-0) [0.50]
This course presents an overview of strategic analysis of operations management in service industries. Tools and concepts are introduced for planning and evaluating initiatives to support service design, productivity and delivery. Topics include layout, location, productivity, service design and yield management while further developing spreadsheet skills in analytical contexts.
Prerequisite(s): (ACCT*1220 or ACCT*2220 ), (1 of ECON*2740, PSYC*1010, STAT*2040, STAT*2060, STAT*2080)
Restriction(s): FARE*3310. Restricted to students in BCOMM.BC, BCOMM.BHFA,C, BCOMM.HTM, BCOMM.HTM:C or BCOMM.TMG.T.
Department(s): School of Hospitality, Food and Tourism Management

HTM*3160 Destination Management and Marketing F (3-0) [0.50]
This course examines the attractiveness of communities (urban and rural; domestic and international) for visitors and the implications that result from the development of a tourism industry. Methods to encourage visitation are explored as are the attempts to create and manage the development of the community and the tourism industry in a sustainable manner.
Prerequisite(s): HTM*1070 or HTM*2170
Restriction(s): Restricted to students in BCOMM.BHAFA, BCOMM.BHFA,C, BCOMM.HTM, BCOMM.HTM:C, BCOMM.TMG.T, or BA.EURS Area of Emphasis in European Business.
Department(s): School of Hospitality, Food and Tourism Management

HTM*3180 Casino Operations Management W (0-0) [0.50]
This course examines the application of business management principles and procedures within casinos. Major topics include: the global and Canadian casino industries, regulation and control, casino accounting and statistics, casino marketing, security and surveillance, human resources, customer service, and specific casino operational management components.
Offering(s): Offered through Distance Education format only. Offered in even-numbered years.
Prerequisite(s): (1 of BUS*2090 , HROB*2090, HROB*2100 , ACCT*2230)
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): School of Hospitality, Food and Tourism Management

HTM*3780 Managing Food in Canada W (3-0) [0.50]
This course provides an introduction to the Canadian food system. The subjects of global trade, supply chain management, food legislation and regulation, food safety, consumer food-related behavior, and food product development are studied to develop an understanding of how they impact the Canadian food system and its functionality.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 1 of FOOD*2010, HTM*1700, HTM*2700
Restriction(s): AGR*1100,FARE*1400
Department(s): School of Hospitality, Food and Tourism Management

HTM*4050 Wine and Oenology W (2-2) [0.50]
This course provides students with knowledge about the wine industry and will emphasize knowledge about product, purchasing, pricing, and service.
Prerequisite(s): 9.00 credits
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): School of Hospitality, Food and Tourism Management

HTM*4060 Advanced Lodging Management W (3-0) [0.50]
This course integrates knowledge and skills in lodging operation, restaurant management, marketing and sales, managerial accounting and finance, revenue management and human resources management. Students will formulate and implement strategic business plans and budgets and evaluate business performance utilizing a hotel simulation program. This course particularly emphasizes development of analytical decision-making and problem solving skills.
Prerequisite(s): HTM*3060
Department(s): School of Hospitality, Food and Tourism Management

HTM*4080 Experiential Learning and Leadership in the Hospitality and Tourism Industry F,W (3-0) [0.50]
An integration of the students’ academic studies with their work experiences. Emphasis will be placed on applying and evaluating theoretical concepts in different working environments. Students will investigate the concept of workplace fit applying this to their prospective career path.
Prerequisite(s): 14.00 credits and a minimum of 700 hours of verified work experience in the hospitality and tourism industry.
Restriction(s): HTM*3150 . Restricted to students in BCOMM.HFA, BCOMM.HFA:C, BCOMM.HTM, BCOMM.HTM:C or BCOMM.TMG.T. Instructor Consent Required.
Department(s): School of Hospitality, Food and Tourism Management

HTM*4090 Hospitality Development, Design and Sustainability F (3-0) [0.50]
This course focuses on the development, design and management of the hospitality built environment. It explores issues related to the planning and development of hospitality properties, provides an introduction to property and asset management as related to the hospitality industry, and examines universal design as applied to the ‘servicescape’, all within the broad context of sustainability.
Prerequisite(s): 14.00 credits including HTM*1000 or HTM*1160
Restriction(s): REAL*3890
Department(s): School of Hospitality, Food and Tourism Management

HTM*4110 Advanced Food Service Operations W (1-7) [0.50]
This course focuses on the management and operation of food service events. Emphasis is placed on event planning and creativity in menu formulation, operational performance, and guest satisfaction. This includes ambience, total service and the dynamic relationship between service and the product of food and beverages.
Prerequisite(s): HTM*3090
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): School of Hospitality, Food and Tourism Management

HTM*4130 Current Management Topics U (3-0) [0.50]
Operating problems in the hospitality and tourism industry are analyzed and discussed using actual case studies. Students should check with the School of Hospitality, Food and Tourism Management to determine what topic will be offered during specific semesters, and which prerequisites, if any, are appropriate.
Restriction(s): Instructor consent required.
Department(s): School of Hospitality, Food and Tourism Management

HTM*4140 Current Management Topics U (3-0) [0.50]
Operating problems in the hospitality and tourism industry are analyzed and discussed. Students should check with the School of Hospitality, Food and Tourism Management to determine what topic will be offered during specific semesters, and which prerequisites, if any, are appropriate.
Restriction(s): Instructor consent required.
Department(s): School of Hospitality, Food and Tourism Management

HTM*4150 Current Management Topics U (3-0) [0.50]
Operating problems in the hospitality and tourism industry are analyzed and discussed. Students should check with the School of Hospitality, Food and Tourism Management to determine what topic will be offered during specific semesters, and which prerequisites, if any, are appropriate.
Restriction(s): Instructor consent required.
Department(s): School of Hospitality, Food and Tourism Management

HTM*4170 International Tourism W (3-0) [0.50]
This course encourages students to develop a cross-cultural awareness of the dimensions and issues of tourism, and the trends that shape the various sectors of the industry in every region of the world. Students will gain knowledge of the social, political and economic impacts of tourism globally, the patterns of international travel, regional development and marketing implications.
Prerequisite(s): 14.00 credits including HTM*3160
Department(s): School of Hospitality, Food and Tourism Management

2019-2020 Undergraduate Calendar
XII. Course Descriptions, Hospitality and Tourism Management

Last Revision: July 4, 2019
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
<th>Description</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTM*4190</td>
<td>Hospitality and Tourism Industry Consultation F,W</td>
<td>(3-0)</td>
<td>This is a project-based course that requires students to take a 'systems-thinking' approach to studying current business problems faced by hospitality and tourism organizations. Students are asked to identify issues, determine context, and use evidence-based research and analysis to provide alternative courses of action and recommendations for actual hospitality businesses.</td>
<td>14.00 credits including ACCT<em>2230, HTM</em>3080, Restricted to students in BCOMM:HAFA, BCOMM:HAFA:C, BCOMM:HTM, BCOMM:HTM:C or BCOMM:TMGT.</td>
<td></td>
<td>School of Hospitality, Food and Tourism Management</td>
</tr>
<tr>
<td>HTM*4250</td>
<td>Hospitality Revenue Management F,W</td>
<td>(3-0)</td>
<td>This course is an advanced exploration of revenue management concepts, tools and application. The objective of the course is to provide a solid foundation in revenue management for careers in tourism, services, and hospitality management.</td>
<td>FARE<em>3310 or HTM</em>3120</td>
<td></td>
<td>School of Hospitality, Food and Tourism Management</td>
</tr>
<tr>
<td>HTM*4500</td>
<td>Special Study in Hospitality and Tourism U</td>
<td>(3-0)</td>
<td>The special study option is designed to provide senior undergraduate students with an opportunity to pursue an independent course of study. The topic selected will be determined by agreement between the student and the faculty member with expertise in the area.</td>
<td>Instructor consent required.</td>
<td></td>
<td>School of Hospitality, Food and Tourism Management</td>
</tr>
</tbody>
</table>
Human Resources and Organizational Behaviour

Gordon S. Lang School of Business and Economics, Department of Management

**HROB*2010 Foundations of Leadership F,W (3-0) [0.50]**

Using an integrated approach to studying leadership, this foundation course covers history, evolving theories, models, and research both from a theoretical point of view and practical application. This course will use a seminar style with applied workshops, class discussions, guest speakers, and student participation. Students will prepare elements of a skills portfolio and a research paper. This is a required course for the Certificate in Leadership.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** BUS*2010

**Restriction(s):** UNIV*2000

**Department(s):** Department of Management

**HROB*2090 Individuals and Groups in Organizations F,W (3-0) [0.50]**

The course serves as an overview to organizational behaviour. It examines the individual, the group, the organization and how the three interrelate in order to enhance performance and productivity. (Also offered through Distance Education format.)

**Equate(s):** BUS*2090

**Restriction(s):** HROB*2100 , HROB*4000, PSYC*3080

**Department(s):** Department of Management

**HROB*2220 Labour Relations F (3-0) [0.50]**

This course provides students with a working knowledge of the institutions and processes (both regulatory and non-regulatory) that govern the relationship between employers and employees. Students will comprehensively explore the human resources implications of the labour relations system by examining the actors, the environmental factors impacting the parties, the establishment and maintenance of bargaining rights, contract negotiation, and the administration of the collective agreement.

**Prerequisite(s):** 2.00 credits

**Equate(s):** ECON*2200

**Department(s):** Department of Management

**HROB*2290 Human Resources Management F,W (3-0) [0.50]**

This course examines the essential human resource function of planning, staffing, employee training and development, employee assistance programs, the legal environment and employee maintenance in a variety of organizational settings.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** 1 of BUS*2090 , BUS*2220 , HROB*2090

**Restriction(s):** BUS*3000 , HROB*2100 , HROB*2290, HROB*3000 , PSYC*3070 This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Management

**HROB*3010 Compensation Systems F (3-0) [0.50]**

This course focuses on how organizations attract, retain, and motivate employees through formal and informal reward mechanisms. Topics include: developing pay structures, job analysis, job evaluation, pay systems, pay system administration, equity issues, and benefits.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** 1 of BUS*3000 , HROB*2100 , HROB*2290, HROB*3000 , PSYC*3070

**Equate(s):** BUS*3010 , PSYC*3010

**Restriction(s):** This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Management

**HROB*3030 Occupational Health and Safety W (3-0) [0.50]**

The major objective of this course is to introduce Human Resources Professionals to this broad and ever changing field. Occupational Health and Safety is an inherently technical subject far broader than legislation only. The multiple dimensions of the various issues - technical, legislative, political and personal are a required part of the training for a professional in this field.

**Prerequisite(s):** 9.00 credits including (1 of BUS*3000 , HROB*2100 , HROB*2290, HROB*3000 , PSYC*3070 )

**Equate(s):** BUS*3030 , PSYC*3060

**Restriction(s):** This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Management
HROB*4030 Advanced Topics In Leadership and Organizational Management U (3-0) [0.50]

Students will actively examine issues in selected topic areas of human resource management at an advanced level and with a focus on application in an actual organizational setting. The focal area of the course, or range of human resource management topics covered by the course, will vary depending on instructor. Selected topic areas may include corporate social responsibility, leadership issues, strategic human resource management, gender issues, human rights issues, recruitment methods and outcomes, functional job analysis and validation methods, job performance criteria and appraisal tools, selection processes and tools, organizational justice, work attitudes, and prejudice and discrimination in the workplace. Specific topic areas will be announced prior to the course selection period.

Prerequisite(s): 12.50 credits including (1 of BUS*3000, HROB*2100, HROB*2290, HROB*3000, PSYC*3070)

Equate(s): BUS*4030

Department(s): Department of Management

HROB*4060 Human Resource Planning W (3-0) [0.50]

This course introduces the strategic planning role that human resources professionals play in organizations. Students will confront the challenges and demands of rightsizing, technological change, corporate repositioning, cost containment, productivity improvements, and the consequences of relocation, outplacement and retraining of staff. An understanding of the essential elements of the human resource planning process in organizations will be provided. Students will acquire knowledge in analyzing, assessing and programming for the human resource requirements of organizational, business and strategic plans.

Prerequisite(s): 15.00 credits including (1 of BUS*3000, HROB*2100, HROB*2290, HROB*3000, PSYC*3070)

Equate(s): BUS*4060, HTM*4160

Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

Department(s): Department of Management

HROB*4100 Evidence-Based People Management F (3-0) [1.00]

This course provides students with the opportunity to conduct hands-on research in an organization on issues that relate to Human Resource Management. Students will work in groups and be expected to find organizations for their research project. Although students will be primarily accountable for finding their organizations to work with, instructor support will be provided to assist students if difficulties arise. The instructor will also serve as a resource throughout the project. Lecture topics include: understanding organizational issues, understanding the consulting process (e.g. engagement, communication, ethics), project planning, data collection methods in an applied context (e.g. sampling, confidentiality, practical constraints), and report writing.

Prerequisite(s): 12.50 credits including (1 of BUS*3000, HROB*2100, HROB*2290, HROB*3000, PSYC*3070)

Equate(s): BUS*4100, PSYC*4100

Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

Department(s): Department of Management
Human Kinetics
Department of Human Health and Nutritional Sciences

HK*2270 Principles of Human Biomechanics F (3-1) [0.50]

This course will address the application of mechanical principles to the study of human movement. Topics will include: motion analysis techniques, anthropometrics, biological tissue tolerance, muscle force generation, static and dynamic equilibrium, work/energy and impulse/momentum as they apply to the description of motion, injury of musculoskeletal tissues and optimization of human performance.

Prerequisite(s): 4.00 credits including BIOL*1090, PHYS*1080
Department(s): Department of Human Health and Nutritional Sciences

HK*2810 Human Physiology I - Concepts and Principles W (3-0) [0.50]

This course will introduce the fundamental concepts and principles of communication systems (transport, ion movement, nerve and synapse, muscle) in humans. It will focus on primary physiological communication systems, such as the endocrine and central nervous systems, and integrate basic principles to understand larger systems such as the gastrointestinal tract.

Prerequisite(s): BIOL*2580, BIOL*1080
Department(s): Department of Human Health and Nutritional Sciences

HK*3100 Neuromuscular Physiology W (3-0) [0.50]

Normal muscle movement is controlled by the motor cortex or by reflexes within the context of the sensory environment. This course will introduce key concepts in motor control of mammalian, human movement, coordination of movement, motor program selection, motor program execution, motor unit recruitment, skeletal muscle excitation-contraction coupling. This course is required for students wishing to gain certification by the Ontario Kinesiology Association.

Prerequisite(s): 1 of BIOM*3200, HK*3810, ZOO*3600
Restriction(s): Restricted to B.Sc., Major in Human Kinetics or Neuroscience Minor.
Department(s): Department of Human Health and Nutritional Sciences

HK*3401 Human Anatomy: Dissection F (3-3) [0.75]

First part of the two-semester course HK*3401/2. Refer to HK*3401/2 for course description.

Co-requisite(s): HK*3810
Restriction(s): HK*3501/2. Registration in the B.Sc. Major in Human Kinetics or Bio-Medical Science.
Department(s): Department of Human Health and Nutritional Sciences

HK*3401/2 Human Anatomy: Dissection F-W [1.50]

A two-semester lecture and laboratory course in human anatomy which includes a detailed study of the skeleton, upper and lower limbs, thorax, abdomen, pelvis, perineum, head, neck and central nervous system. The labs involve hands-on dissection. This is a two-semester course offered over consecutive semesters. When you select it you must select HK*3401 in the Fall semester and HK*3402 in the Winter semester. A grade will not be assigned to HK*3401 until HK*3402 has been completed.

Co-requisite(s): HK*3810
Restriction(s): HK*3501/2. Registration in the B.Sc. Major in Human Kinetics or Bio-Medical Science.
Department(s): Department of Human Health and Nutritional Sciences

HK*3402 Human Anatomy: Dissection W (3-3) [0.75]

Second part of the two-semester course HK*3401/2. Refer to HK*3401/2 for course description.

Prerequisite(s): HK*3401
Department(s): Department of Human Health and Nutritional Sciences

HK*3501 Human Anatomy: Prosection F (3-2) [0.75]

First part of the two-semester course HK*3501/2. Refer to HK*3501/2 for course description.

Co-requisite(s): HK*3810
Restriction(s): HK*3401/2. Registration in the B.Sc. Major in Human Kinetics or Bio-Medical Science. Instructor consent required.
Department(s): Department of Human Health and Nutritional Sciences

HK*3501/2 Human Anatomy: Prosection F-W [1.50]

A two-semester lecture and laboratory course in human anatomy which includes a detailed study of the skeleton, upper and lower limbs, thorax, abdomen, pelvis, perineum, head, neck and central nervous system. Labs involve observation of anatomical details using prosections and dissected specimens. This is a two-semester course offered over consecutive semesters. When you select it you must select HK*3501 in the Fall semester and HK*3502 in the Winter semester. A grade will not be assigned to HK*3501 until HK*3502 has been completed.

Co-requisite(s): HK*3810
Restriction(s): HK*3401/2. Registration in the B.Sc. Major in Human Kinetics or Bio-Medical Science. Instructor consent required.
Department(s): Department of Human Health and Nutritional Sciences

HK*3502 Human Anatomy W (3-2) [0.75]

Second part of the two-semester course HK*3501/2. Refer to HK*3501/2 for course description.

Prerequisite(s): HK*3501
Department(s): Department of Human Health and Nutritional Sciences

HK*3600 Applied Human Kinetics I F (3-3) [0.75]

This course covers laboratory techniques which are central to human biology, together with their underlying concepts. Human performance and function are evaluated through cellular, organic, systemic and whole person studies. The student's technical competence and conceptual understanding are emphasized.

Prerequisite(s): HK*2270
Co-requisite(s): HK*3810
Restriction(s): Registration in the Human Kinetics major.
Department(s): Department of Human Health and Nutritional Sciences

HK*3810 Human Physiology II - Integrated Systems F (4-0) [0.75]

This course will build on the fundamental concepts and principles of communication systems developed in Human Physiology I and examine more complex physiological phenomena such as the control of blood volume and blood pressure, which integrates tissue of the cardiovascular system, the heart, vasculature and kidney, and acid-based physiology, which integrates the respiratory system and the kidney. Finally, all systems will be integrated to determine how the body responds to challenges such as altitude, exercise and shock (blood loss).

Prerequisite(s): HK*3810
Department(s): Department of Human Health and Nutritional Sciences

HK*4070 Clinical Biomechanics W (3-2) [0.50]

This course covers functional anatomy, neurophysiology and mechanical characteristics of humans at the tissues and whole-body levels. Pathomechanics of human movement resultant from disease, abuse or trauma will be examined. Special emphasis will be placed on etiology, testing and correction of functional disorders with special reference to balance, gait and orthopaedic biomechanics.

Prerequisite(s): ENGG*2660 or (HK*2270, HK*3600)
Department(s): Department of Human Health and Nutritional Sciences

HK*4230 Advanced Study in Human Health and Nutritional Sciences S,F,W (3-0) [0.50]

The student will conduct independent literature research of an approved topic to be decided by the student in consultation with a faculty advisor. Students must make arrangements with both a faculty advisor and the course coordinator at least one semester in advance and the signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the student is registered for the course.

Prerequisite(s): 12.00 credits
Restriction(s): Course coordinator consent required.
Department(s): Department of Human Health and Nutritional Sciences

HK*4240 Occupational Biomechanics and Ergonomics W (3-2) [0.75]

This course introduces the methods available for reducing musculoskeletal injuries in the workplace. Topics include: biomechanical, psychophysical, physiological, and integrated approaches to performing physical demands analyses, anatomy and etiology of low back injuries and upper limb disorders, principles of redesigning tasks to reduce the risk of injury, pre-employment screening and legislated guidelines. Students apply the course material to ergonomic assessments performed in industrial environments.

Prerequisite(s): ENGG*1210 or HK*3600
Department(s): Department of Human Health and Nutritional Sciences
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HK*4340 Genomics: Exercise and Disease F (3-0) [0.50]</td>
<td>This course is an in-depth examination of how exercise 1) effects gene transcription to influence elite performance (ie. training for sport) and 2) can be used as a therapeutic strategy to influence the expression of specific genes to recover the health of an individual (ie. exercising for health). The course represents a unique opportunity to understand the beneficial effects of physical activity and exercise at the genetic level.</td>
<td>12.00 credits</td>
<td>NUTR*3360</td>
<td>Department of Human Health and Nutritional Sciences</td>
</tr>
<tr>
<td>HK*4340 Research in Human Health and Nutritional Sciences S,F,W (0-12) [1.00]</td>
<td>The student will select a research topic and design and complete a project in an area of interest, in consultation with a faculty advisor. Students must make arrangements with both a faculty advisor and the course coordinator at least one semester in advance and the signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the student is registered for the course.</td>
<td>12.00 credits</td>
<td></td>
<td>Department of Human Health and Nutritional Sciences</td>
</tr>
<tr>
<td>HK*4371 Research in Human Health and Nutritional Sciences II S,F,W (0-6) [0.50]</td>
<td>First part of the two-semester course HK<em>4371/2. The student will select a research topic and design and complete a project in an area of interest, in consultation with a faculty advisor. This is a two-semester course offered over consecutive semesters. When you select it you must select HK</em>4371 in the first semester and HK<em>4372 in the second semester. A grade will not be assigned to HK</em>4371 until HK*4372 has been completed. Students must make arrangements with both a faculty advisor and the course coordinator at least one semester in advance and the signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the student is registered for the course.</td>
<td>12.00 credits</td>
<td></td>
<td>Department of Human Health and Nutritional Sciences</td>
</tr>
<tr>
<td>HK*4372 Research in Human Health and Nutritional Sciences II F,W,S (0-6) [0.50]</td>
<td>Second part of the two-semester course HK<em>4371/2. The student will select a research topic and design and complete a project in an area of interest, in consultation with a faculty advisor. This is a two-semester course offered over consecutive semesters. When you select it you must select HK</em>4371 in the first semester and HK<em>4372 in the second semester. A grade will not be assigned to HK</em>4371 until HK*4372 has been completed. Students must make arrangements with both a faculty advisor and the course coordinator at least one semester in advance and the signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the student is registered for the course.</td>
<td>12.00 credits</td>
<td></td>
<td>Department of Human Health and Nutritional Sciences</td>
</tr>
<tr>
<td>HK*4441 Advanced Study in Human Anatomy F (1-10) [1.00]</td>
<td>First part of the two-semester course HK<em>4441/2. This course will provide students who have completed HK</em>3401/2 with the opportunity to pursue anatomical studies in an interdisciplinary fashion at the advanced level. Students will use their knowledge in anatomy to develop educational material and/or teach anatomical concepts and applications of human anatomy. This is a two-semester course offered over consecutive semesters. When you select it you must select HK<em>4441 in the first semester and HK</em>4442 in the second semester. A grade will not be assigned to HK<em>4441 until HK</em>4442 has been completed. Students must make arrangements with the course coordinator at least one semester in advance, and the signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the student is registered for the course.</td>
<td>12.00 credits</td>
<td></td>
<td>Department of Human Health and Nutritional Sciences</td>
</tr>
<tr>
<td>HK*4444 Advanced Study in Human Anatomy W-F (2.00)</td>
<td>This course will provide students who have completed HK<em>3401/2 with the opportunity to pursue anatomical studies in an interdisciplinary fashion at the advanced level. Students will use their knowledge in anatomy to develop educational material and/or teach anatomical concepts and applications of human anatomy. This is a two-semester course offered over consecutive semesters. When you select it you must select HK</em>4441 in the first semester and HK<em>4442 in the second semester. A grade will not be assigned to HK</em>4441 until HK*4442 has been completed. Students must make arrangements with the course coordinator at least one semester in advance, and the signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the student is registered for the course.</td>
<td>12.00 credits</td>
<td></td>
<td>Department of Human Health and Nutritional Sciences</td>
</tr>
<tr>
<td>HK*4442 Advanced Study in Human Anatomy W (1-10) [1.00]</td>
<td>Second part of the two-semester course HK<em>4441/2. This course will provide students who have completed HK</em>3401/2 with the opportunity to pursue anatomical studies in an interdisciplinary fashion at the advanced level. Students will use their knowledge in anatomy to develop educational material and/or teach anatomical concepts and applications of human anatomy. This is a two-semester course offered over consecutive semesters. When you select it you must select HK<em>4441 in the first semester and HK</em>4442 in the second semester. A grade will not be assigned to HK<em>4441 until HK</em>4442 has been completed. Students must make arrangements with the course coordinator at least one semester in advance, and the signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the student is registered for the course.</td>
<td>12.00 credits</td>
<td></td>
<td>Department of Human Health and Nutritional Sciences</td>
</tr>
<tr>
<td>HK*4460 Regulation of Human Metabolism W (3-0) [0.50]</td>
<td>The course focuses on the underlying metabolic events that occur in association with exercise. Skeletal muscle metabolism and substrate delivery are discussed with respect to the intracellular biochemical events integrated with both the endocrine and the chemical aspects of neural mechanisms.</td>
<td>12.00 credits</td>
<td>(HK<em>3810 or HK</em>3940)</td>
<td>Department of Human Health and Nutritional Sciences</td>
</tr>
<tr>
<td>HK*4510 Teaching, Learning &amp; Knowledge Transfer S,F,W (0-12) [1.00]</td>
<td>In consultation with a faculty advisor, the student will select, design and complete an independent project on the scholarship of teaching, learning and/or knowledge transfer in human health. Students must make arrangements with both a faculty advisor and the course coordinator at least one semester in advance and the signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the student is registered for the course.</td>
<td>12.00 credits</td>
<td></td>
<td>Department of Human Health and Nutritional Sciences</td>
</tr>
</tbody>
</table>
HK*4511 Teaching, Learning & Knowledge Transfer II S,F,W (0-6) [0.50]

First part of a two-semester course HK*4511/2. In consultation with a faculty advisor, the student will select, design and complete an independent project on the scholarship of teaching, learning and/or knowledge transfer in human health. This is a two-semester course offered over consecutive semesters; when you select it you must select HK*4511 in the first semester and HK*4512 in the second semester (a grade will not be assigned to HK*4511 until HK*4512 has been completed). Students must make arrangements with both a faculty advisor and the course coordinator at least one semester in advance and the signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the student is registered for the course.

Prerequisite(s): 10.00 credits including BIOL*1080
Restriction(s): Course coordinator consent required.
Department(s): Department of Human Health and Nutritional Sciences

HK*4512 Teaching, Learning & Knowledge Transfer II S,F,W (0-6) [1.00]

In consultation with a faculty advisor, the student will select, design and complete an independent project on the scholarship of teaching, learning and/or knowledge transfer in human health. This is a two-semester course offered over consecutive semesters; when you select it you must select HK*4511 in the first semester and HK*4512 in the second semester (a grade will not be assigned to HK*4511 until HK*4512 has been completed). Students must make arrangements with both a faculty advisor and the course coordinator at least one semester in advance and the signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the student is registered for the course.

Prerequisite(s): 10.00 credits including BIOL*1080
Restriction(s): Course coordinator consent required.
Department(s): Department of Human Health and Nutritional Sciences

HK*4550 Human Cardio-respiratory Physiology F (3-0) [0.50]

The central focus of this course is a comprehensive examination of the effects of a variety of work parameters on normal cardio-respiratory adjustments required to meet metabolic demands. Immediate adjustments to increase metabolic rate as well as long term cardio-respiratory adaptability will be discussed.

Prerequisite(s): HK*3810 or HK*3940
Department(s): Department of Human Health and Nutritional Sciences

HK*4600 Applied Human Kinetics II W (3-3) [0.75]

The objective of this course is to expand on the introductory laboratory practices developed in HK 3600 Applied Human Kinetics I. Students will examine the functioning of a human body at rest and in motion, while learning clinical and advanced laboratory techniques. The students will be introduced to the underlying concepts of various physiological and biomechanical measures in lecture. Subsequently, the principles from the lecture will be used to make direct measures in the laboratory, with an emphasis on understanding exercise physiology, clinical testing practices, and integrative approaches to studying human movement. Students will be asked to critically analyze the laboratory measures and findings, and to integrate the lecture and laboratory material in formalized laboratory reports.

Prerequisite(s): HK*3600
Restriction(s): Restricted to students in Human Kinetics.
Department(s): Department of Human Health and Nutritional Sciences
## Humanities

**College of Arts**

### HUMN*1030 What Makes a Literary Classic? F (3-0) [0.50]

Why are some books considered classics? What is the nature of their impact on literature, on culture, at either the national or world level, on their age? The focus of this course will be on works that are considered classics, from different ages and from different national and linguistic traditions, as well as theoretical essays. Texts read will be in English translation.

| Offering(s): | Offered in odd-numbered years. |
| Department(s): | School of Languages and Literatures |

### HUMN*1300 Fundamentals of Arts Management I W (3-0) [0.50]

This course provides an introduction to arts, culture, and heritage management as a career possibility. Students will develop an understanding of management and communication as they relate to the cultural sector (visual art, film and theatre, sound/music, and heritage). Course assignments and projects will deal with the broad range of issues facing those who work in management/administration of the arts, whether in the public or the private sectors.

| Department(s): | School of Fine Art and Music |

### HUMN*1300 Fundamentals of Arts Management II F (3-0) [0.50]

This course provides an in-depth investigation of the practice of arts management in the Canadian context. Students will explore and research the history and structure of arts funding and arts organizations and learn the basics of entrepreneurship in the Canadian context.

| Prerequisite(s): | 2.00 credits |
| Department(s): | School of Fine Art and Music |

### HUMN*3000 Narratives of Migration W (3-0) [0.50]

People move from one location to another for a variety of reasons. This course examines how literary texts and other forms of creative expression represent various forms of dislocation such as migration and exile. The focus of the course will be on theories of migration and creative works in an array of texts and media. Texts will be read in English translation.

| Offering(s): | Offered in even-numbered years. |
| Department(s): | School of Languages and Literatures |

### HUMN*3020 Myth and Fairy Tales in Germany F (3-0) [0.50]

The course explores the role of mythology, fairy tales and legends in German literature and culture. Topics may include the formation of a national identity, the allegorical fairy tale and its role in Romanticism, women and the fairy tale, the fairy tale and the socialization of children (incl. Disney), adaptations of mythologies in modern literature. Authors may include Goethe, Brothers Grimm, ETA Hoffmann. Lectures and texts are in English. This course is offered in conjunction with GERM*3020.

| Offering(s): | Offered in even-numbered years. |
| Department(s): | School of Languages and Literatures |

### HUMN*3100 London Studies in the Humanities W (2-3) [0.50]

An integrated course of studies in the Humanities (including 2 or more of theatre, visual arts, history, music, literature and philosophy) as they relate to London cultural resources. For London Semester students only.

| Prerequisite(s): | Admission to London Semester. |
| Department(s): | Dean's Office, College of Arts |

### HUMN*3150 Paris Studies in the Humanities W (2-3) [0.50]

An integrated course of study in the Humanities (including 2 or more of theatre, visual arts, history, music, literature and philosophy) as they relate to Paris cultural resources. For Paris Semester students only.

| Prerequisite(s): | Admission to Paris Semester. |
| Department(s): | Dean's Office, College of Arts |

### HUMN*3190 Experiential Learning S,F,W (0-0) [0.50]

This course provides an opportunity for independent study based in the Arts and/or Humanities related to either voluntary or paid experience. Evaluation will be based on assignments directly related to the experience. Students interested in this course must have their project approved by the instructor and the office of the Associate Dean (Academic) of the College of Arts prior to the semester in which they plan to engage in their experiential learning experience.

| Prerequisite(s): | 7.50 credits |
| Restriction(s): | Instructor consent required. |
| Department(s): | Dean's Office, College of Arts |

### HUMN*3210 Introduction to Polish History and Culture F (6-4) [1.00]

An integrated course of studies in the humanities as they relate to the resources of Krakow, Poland. For Krakow Semester students only.

| Prerequisite(s): | Admission to Krakow Semester. |
| Department(s): | Dean's Office, College of Arts |

### HUMN*3220 Krakow Studies in the Humanities I F (3-2) [0.50]

An integrated course of studies in the humanities as they relate to the resources of Krakow, Poland. For Krakow Semester students only.

| Prerequisite(s): | Admission to the Krakow Semester. |
| Department(s): | Dean's Office, College of Arts |

### HUMN*3230 Krakow Studies in the Humanities II F (3-2) [0.50]

An integrated course of studies in the humanities as they relate to the resources of Krakow, Poland. For Krakow Semester students only.

| Prerequisite(s): | Admission to the Krakow Semester. |
| Department(s): | Dean's Office, College of Arts |

### HUMN*3240 India Studies in the Humanities W (3-0) [0.50]

An integrated course of studies in the humanities as they relate to India. This course looks at selected aspects of one or more areas in the humanities, including Indian religions, philosophy, literature (in English), history, language (Hindi), art and music. For India Semester students only.

| Prerequisite(s): | Admission to the India Semester. |
| Department(s): | Dean's Office, College of Social and Applied Human Sciences |

### HUMN*3300 Latin American Studies in the Humanities F,W (1-2) [0.50]

This is an integrated course of studies in the humanities as they relate to the resources of Latin America. It is offered either as preparation for the Latin America semester (in fall) or during this study abroad program (in winter).

| Prerequisite(s): | Admission to the Latin America semester. |
| Restriction(s): | Instructor consent required. |
| Department(s): | Dean's Office, College of Arts |

### HUMN*3400 Renaissance Lovers and Fools F (3-0) [0.50]

In this course, students will read Italian Renaissance plays such as Machiavelli’s “The Mandrake” and Bibbiena’s “Calandria” with special attention to the portrayals of lovers and fools. The course will place particular emphasis on representations of class and gender relations. Additional readings in medieval literature, history, and critical theory will provide background and context for the plays. Lectures and texts are in English. This course is offered in conjunction with ITAL*3400.

| Prerequisite(s): | 5.00 credits |
| Department(s): | Dean's Office, College of Arts |

### HUMN*3470 Holocaust & WWII in German Lit. & Film F (3-0) [0.50]

This course focuses on texts and films pertaining to World War II and the Holocaust, the development of the thoughts and the language of genocide, and the representation of the Holocaust in literature and films. The objective is to gain an understanding of the ideas and emotions underlying ethnocentrism and anti-Semitism, and to consider artistic responses to the experience of persecution and mass-murder. Lectures and discussions are in English. Students who wish to do a German credit must register for GERM*3470.

| Offering(s): | Offered in odd-numbered years. |
| Prerequisite(s): | 5.00 credits |
| Department(s): | School of Languages and Literatures |
This course provides an opportunity for independent study based in the Arts and/or Humanities related to either voluntary or paid experience. Evaluation will be based on assignments directly related to the experience. Students interested in this course must have their project approved by the instructor and the office of the Associate Dean (Academic) of the College of Arts prior to the semester in which they plan to engage in their experiential learning experience.

**Prerequisite(s):** 10.00 credits

**Restriction(s):** Instructor consent required.

**Department(s):** Dean's Office, College of Arts
### Indigenous

**School of Languages and Literatures**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Description</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDG*1100</td>
<td>Indigenous Language and Culture W (3-0) [0.50]</td>
<td></td>
<td>This course will introduce students to the study of an indigenous language and its cultural, historical, and contemporary context. It will provide the learner with basic speaking skills and the framework of the languages' orthography. Please consult the School of Languages and Literatures to confirm which language will be taught.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>School of Languages and Literatures</td>
</tr>
</tbody>
</table>
## Interdisciplinary Physical Science

### IPS*1500 Integrated Mathematics and Physics I F (6-4) [1.00]
This is a foundational course for students in B.Sc. mathematical and physical sciences majors. The disciplines of Mathematics and Physics are taught in an integrated fashion that demonstrates how they support and enrich one another. Atomic structure, algebra and trigonometry, forces and Newton's laws, functions and graphing, differentiation, angular momentum and energy conservation, limits, integration, kinematics, and special relativity are presented in a harmonized fashion to ensure students have an improved understanding of these fundamentals.

**Prerequisite(s):** 1 of 4U Physics, PHYS*1020, PHYS*1300  
**Restriction(s):** MATH*1080, MATH*1200, PHYS*1000, PHYS*1080  
**Department(s):** Department of Physics, Department of Mathematics and Statistics

### IPS*1510 Integrated Mathematics and Physics II W (6-4) [1.00]
This is the second foundational course for students in B.Sc. mathematical and physical sciences majors. The disciplines of Mathematics and Physics are taught in an integrated fashion that demonstrates how they support and enrich one another. Thermodynamics, integration, electrostatics, partial derivatives, multidimensional integrals, simple harmonic motion, Taylor's series, and spectroscopy are presented in a harmonized fashion to ensure students have an improved understanding of these fundamentals.

**Prerequisite(s):** IPS*1500  
**Restriction(s):** MATH*1090, MATH*1210, MATH*2080, PHYS*1010, PHYS*1070, PHYS*1130  
**Department(s):** Department of Physics, Department of Mathematics and Statistics

### IPS*3000 Science Communication F (3-3) [0.50]
This course focuses on developing the skills required to communicate science for non-specialist audiences. The principles and practices of public speaking and writing will be explored, employing a variety of media. Through multiple oral and written assignments, students will explore tailoring their message for various audience-types.

**Prerequisite(s):** 2.00 credits in PHYS at the 2000 level or higher  
**Restriction(s):** PHYS*4300  
**Department(s):** Department of Physics
# Interdisciplinary Social Science

_College of Social and Applied Human Sciences_

**ISS*2000 Asia U (3-0) [0.50]**

This course will survey China and/or India, noting the major historical trends, cultural factors, economic systems, and political institutions and political processes.

*Department(s):* Department of Political Science

**ISS*3100 London Studies in the Social Sciences W (2-3) [0.50]**

An integrated course of studies in the social sciences as they relate to the resources of London. For London Semester students only.

*Restriction(s):* Admission to the London Semester.

*Department(s):* Dean's Office, College of Arts

**ISS*3150 Paris Studies in the Social Sciences W (2-0) [0.50]**

An integrated course of studies in the social sciences as they relate to the resources of Paris. For Paris Semester students only.

*Restriction(s):* Admission to the Paris Semester.

*Department(s):* Dean's Office, College of Arts

**ISS*3250 Krakow Studies in the Social Sciences I F (3-2) [0.50]**

An integrated course of studies in the social sciences as they relate to the resources in Krakow, Poland. For Krakow students only.

*Restriction(s):* Admission to the Krakow Semester.

*Department(s):* Dean's Office, College of Social and Applied Human Sciences

**ISS*3260 Krakow Studies in the Social Sciences II F (3-2) [0.50]**

An integrated course of studies in the social sciences as they relate to the resources in Krakow, Poland. For Krakow students only.

*Restriction(s):* Admission to the Krakow Semester.

*Department(s):* Dean's Office, College of Social and Applied Human Sciences

**ISS*3270 India Studies in the Social Sciences W (3-0) [0.50]**

An integrated course of studies in the social sciences as they relate to India. This course looks at selected aspects of one or more areas in the social, geographic, economic and political aspects of Indian society. For India Semester students only.

*Restriction(s):* Admission to the India Semester.

*Department(s):* Dean's Office, College of Social and Applied Human Sciences

**ISS*3300 Latin American Studies in the Social Sciences F,W (1-2) [0.50]**

This is an integrated course of studies in the social sciences as they relate to the resources of Latin America. It is offered either as preparation for the Latin America semester (in fall) or during this study abroad program (in winter).

*Restriction(s):* Admission to the Latin America semester. Instructor consent required.

*Department(s):* Dean's Office, College of Arts

**ISS*3420 Women Social and Political Theorists W (3-0) [0.50]**

The writings of seventeenth and nineteenth century women social and political theorists will be explored as contributing to the development of classical and contemporary social and political theory. These women wrote on status of women and gender role issues as well as dealing with such fundamental matters as the nature and origin of society/social contract, political rights and obligations, government, constitutional change, revolution, slavery, socialism, the welfare state, imperialism and racism. An important feature of the course would be to show women theorists' contributions on central political interests and the integration of gender issues with those of class and race.

*Prerequisite(s):* SOAN*2111/2 or POLS*2000

*Restriction(s):* Not available to students in Anthropology, Criminal Justice & Public Policy or Sociology areas of study.

*Department(s):* Department of Sociology and Anthropology, Department of Political Science
Interdisciplinary University

UNIV*3550, UNIV*3550 and UNIV*4500 are re-numbered and now appear under Environmental Design and Rural Development (EDRD)

UNIV*1200 First Year Seminar F,W (3-0) [0.50]
First Year Seminars are interdisciplinary courses designed especially for first year students. The goal of the First Year Seminar course is to provide opportunities for students to participate in small enrolment, discussion-oriented classes in their first year. Different seminar topics are offered each year in each separate course section, reflecting the particular research or professional interest of the course instructor. The seminar course counts as a free elective in the student's Schedule of Studies. For information about how the seminar courses may in some cases fulfill particular program distribution requirements, students should contact their program counsellor. A list of current and archived offerings is available by following the links on the First Year Seminars web page.

Restriction(s): Fewer than 5.00 credits.
Department(s): Provost & VP Academic

UNIV*1250 Experiential Learning Opportunity I: Peer Helper U (0-0) [0.00]
Open only to students who have been accepted into the Peer Helper program. This 0.00 credit course recognizes the successful completion of the Peer Helper training program and a supervised field experience in an approved Peer Helper placement. A pass/fail grade will not be assigned to UNIV*1250 until UNIV*1260 has been completed. Students who wish to enroll in this course should see Student Life and Career Services for more information.

Prerequisite(s): UNIV*1250
Department(s): Associate VP Academic

UNIV*1260 Experiential Learning Opportunity II: Peer Helper U (0-0) [0.00]
Open only to students who have been accepted into the Peer Helper program. This 0.00 credit course recognizes the successful completion of the Peer Helper training program and a supervised field experience in an approved Peer Helper placement. A pass/fail grade will be assigned at the end of the completion of both UNIV*1250 and UNIV*1260. Student who wish to enroll in this course should see Student Life for more information.

Prerequisite(s): UNIV*1250
Department(s): Associate VP Academic

UNIV*2100 CAREER READY: DEVELOP YOUR FUTURE F,W (3-0) [0.50]
This course introduces students to career development theory and provides the practical knowledge required to succeed in the current and future world of work. Students will examine key concepts from career development theory and will engage in reflective and experiential learning activities aimed at preparing them for job search and the world of work. Within the context of career development, issues related to mental well-being, diversity, intercultural competencies, and the implications of disclosure and accommodation will be studied.

Offering(s): Offered through Distance Education format only.
Prerequisite(s): 4.00 credits
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to non-BComm and non-Co-op students.
Department(s): Department of Management

UNIV*2250 Experiential Learning Opportunity III: Peer Helper U (0-0) [0.00]
Open only to students who have been accepted into the Peer Helper program. This 0.00 credit course recognizes the successful completion of the Peer Helper training program and a supervised field experience in an approved Peer Helper placement. A pass/fail grade will not be assigned to UNIV*2250 until UNIV*2260 has been completed. Students who wish to enroll in this course should see Student Life and Career Services for more information.

Prerequisite(s): UNIV*1250, UNIV*1260
Department(s): Associate VP Academic

UNIV*2260 Experiential Learning Opportunity IV: Peer Helper U (0-0) [0.00]
Open only to students who have been accepted into the Peer Helper program. This 0.00 credit course recognizes the successful completion of the Peer Helper training program and a supervised field experience in an approved Peer Helper placement. A pass/fail will be assigned at the end of the completion of both UNIV*2250 and UNIV*2260. Students who wish to enroll in this course should see Student Life and Career Services for more information.

Prerequisite(s): UNIV*2250
Department(s): Associate VP Academic

UNIV*2410 Engaged Global Citizenship F (3-0) [0.50]
In this course students will gain an understanding of the concepts, values, and skills related to effective community engagement and responsible global citizenship. As culturally-aware global citizens, students will be challenged to identify a meaningful role for themselves in contributing to a more equitable and sustainable environment by developing an action plan for participating in community engagement opportunities at the local, national or international scale. This is the required introductory course for the Certificate in Civic Engagement and Global Citizenship.

Prerequisite(s): 4.00 credits
Restriction(s): Fewer than 10.50 credits.
Department(s): Department of Political Science

UNIV*3000 Civic Engagement & Service Learning W (3-0) [0.50]
This course provides a unique opportunity for students to develop civic leadership skills and increase their awareness and appreciation for the social relevance of higher education through a community service-learning experience. Curricular and co-curricular learning are integrated through continued academic study and its application, modification, and critique in a community context. Students will conduct research and seminars on a selected topic while simultaneously completing a placement in a community agency appropriate to that topic.

Prerequisite(s): 9.00 credits
Department(s): Associate VP Academic

UNIV*3100 University Studies in London I U (3-0) [0.50]
This course is an intensive and integrated study in the arts, social sciences and/or sciences as they relate to the resources of London. This course is for London Session Semester students only.

Prerequisite(s): Admission to the London Semester.
Department(s): Dean's Office, College of Arts

UNIV*3200 University Studies in London II U (3-0) [0.50]
This course is an intensive and integrated study in the arts, social sciences and/or sciences as they relate to the resources of London. This course is for London Session Semester students only.

Prerequisite(s): Admission to the London Semester.
Department(s): Dean's Office, College of Arts

UNIV*3310 Flexible Internship in Agri-Food F,W (2-0) [0.50]
This course offers an experiential learning opportunity through an unpaid 40-hour internship in the agri-food sector with partners in government, industry or civil society organizations. Students will learn about the integrated nature of the agro-food industry in Canada and the forces that shape this system, including their own food choices. Knowledge of current and future trends in the agri-food system will assist students with developing career-readiness skills that will be applied during the process of securing and working in an internship position. This internship is flexible and can be completed during the course or by the end of the following semester. Completing the internship is required for completing the course.

Prerequisite(s): 9.00 credits
Restriction(s): UNIV*2100. Not available to co-op students. Must have at least a 70% cumulative grade average. Must be in class levels 05, 06 or 07 to be able to complete internship requirement before graduation. Instructor consent required.
Department(s): Department of Food, Agricultural and Resource Economics

UNIV*3310 University Studies in Paris I W (2-3) [0.50]
An integrated course of study in subject areas that will vary from year to year but relate to resources in Paris.

Prerequisite(s): Admission to the Paris Semester.
Department(s): Dean's Office, College of Arts

UNIV*3310 University Studies in Paris II W (2-3) [0.50]
An integrated course of study in subject areas that will vary from year to year but relate to resources in Paris.

Prerequisite(s): Admission to the Paris Semester.
Department(s): Dean's Office, College of Arts
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Description</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV*3170</td>
<td>University Studies in Paris III W (2-3) [0.50]</td>
<td>An integrated course of study in subject areas that will vary from year to year but relate to resources in Paris.</td>
<td>Admission to the Paris Semester.</td>
<td></td>
<td>Dean's Office, College of Arts</td>
</tr>
<tr>
<td>UNIV*3210</td>
<td>Contemporary China F (3-3) [1.00]</td>
<td>The course focuses on aspects of Shanghai as exemplifying the emergence of contemporary China. The course engages perspectives from the humanities and social sciences.</td>
<td>Admission to the Shanghai semester.</td>
<td>Instructor consent required.</td>
<td>Dean's Office, College of Arts</td>
</tr>
<tr>
<td>UNIV*3220 University Studies in Shanghai I F (3-0) [0.50]</td>
<td>This is an intensive and integrated course which focuses on a topic relating to Shanghai.</td>
<td>Admission to the Shanghai semester.</td>
<td>Instructor consent required.</td>
<td>Dean's Office, College of Arts</td>
<td></td>
</tr>
<tr>
<td>UNIV*3230 University Studies in Shanghai II U (3-0) [0.50]</td>
<td>This is an intensive and integrated course which focuses on a topic relating to Shanghai.</td>
<td>Admission to the Shanghai semester.</td>
<td>Instructor consent required.</td>
<td>Dean's Office, College of Arts</td>
<td></td>
</tr>
<tr>
<td>UNIV*3240 University Studies in Shanghai III U (3-0) [0.50]</td>
<td>This is an intensive and integrated course which focuses on a topic relating to Shanghai.</td>
<td>Admission to the Shanghai semester.</td>
<td>Instructor consent required.</td>
<td>Dean's Office, College of Arts</td>
<td></td>
</tr>
<tr>
<td>UNIV*4410 Civic Engagement with Communities W (3-0) [0.50]</td>
<td>In this capstone course students will critically reflect on the connections they have developed between their personal identity as engaged citizens and the impacts their contributions have made with the broader community. An e-portfolio of their Certificate experience will be used to gain an appreciation of their personal growth and acquired skills, and to identify the challenges and opportunities in a lifelong commitment to social justice, sustainability, and respect for diversity. This is the required capstone course for the Certificate in Civic Engagement and Global Citizenship.</td>
<td>UNIV*2410, 90 hours of approved community engagement.</td>
<td>Instructor consent required.</td>
<td>Department of Political Science</td>
<td></td>
</tr>
</tbody>
</table>
Integrative Biology
Department of Integrative Biology

**IBIO*3100 Interpreting Biodiversity I W (1.5-3) [0.50]**
This is the first of two courses that explore global and local issues in biodiversity as a capstone experience for biodiversity majors. The overall goal of the course is to provide opportunities for BIOD students to engage the application of their knowledge and skills to complex problems and issues involving “real-life” biodiversity projects within academic, government, or industry spheres. The learning outcomes include the application of key skills for interpreting biodiversity and writing a research proposal and work plan that will be executed in IBIO*4100.

*Prerequisite(s):* 12.00 credits  
*Restriction(s):* Enrolment restricted to BSCH:BIOD majors.  
*Department(s):* Department of Integrative Biology

**IBIO*4100 Interpreting Biodiversity II F (1.5-3) [1.00]**
This is the second of two courses that explore global and local issues in biodiversity as a capstone experience for biodiversity majors. The overall goal of the course is to provide opportunities for students to engage the application of their knowledge and skills to complex problems and issues involving “real-life” biodiversity projects within academic, government, or industry spheres. The learning outcomes include the application of key skills for interpreting biodiversity, the collection and analysis of biodiversity data. This student centred experience will culminate with an oral presentation and written report to the “clients”, classmates and instructors.

*Prerequisite(s):* IBIO*3100  
*Restriction(s):* Enrolment restricted to BSCH:BIOD majors.  
*Department(s):* Department of Integrative Biology

**IBIO*4500 Research in Integrative Biology I F,W (0-12) [1.00]**
The student will undertake an independent research project of a practical or theoretical nature that relates either to organismal biology or the teaching of organismal biology and is conducted under the supervision of a faculty member. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the project is to be completed.

*Prerequisite(s):* 12.00 credits  
*Restriction(s):* Minimum cumulative average of 70%. Instructor consent required.  
*Department(s):* Department of Integrative Biology

**IBIO*4510 Research in Integrative Biology II F,W (0-12) [1.00]**
The student will undertake an independent research project of a practical or theoretical nature that relates either to organismal biology or the teaching of organismal biology and is conducted under the supervision of a faculty member. Students must make arrangements with both a faculty supervisor and the course coordinator at least one semester in advance. A departmental registration form must be obtained from the course coordinator and submitted no later than the second class day of the semester in which the project is to be completed.

*Prerequisite(s):* IBIO*4500  
*Restriction(s):* Minimum cumulative average of 70%. Instructor consent required.  
*Department(s):* Department of Integrative Biology

**IBIO*4521 Thesis in Integrative Biology F (0-12) [1.00]**
This course is the first part of the two-semester course IBIO*4521/2. Refer to IBIO*4521/2 for course description. This is a two-semester course offered over consecutive semesters F-W. When you select this course, you must select IBIO*4521 in the Fall semester and IBIO*4522 in the Winter semester. A grade will not be assigned to IBIO*4521 until IBIO*4522 has been completed.

*Prerequisite(s):* 12.00 credits  
*Restriction(s):* Normally a minimum cumulative average of 70%. Permission of course coordinator.  
*Department(s):* Department of Integrative Biology

**IBIO*4522 Thesis in Integrative Biology W (0-12) [1.00]**
This course is the second part of the two-semester course IBIO*4521/2. Refer to IBIO*4521/2 for course description. This is a two-semester course offered over consecutive semesters F-W. When you select this course, you must select IBIO*4521 in the Fall semester and IBIO*4522 in the Winter semester. A grade will not be assigned to IBIO*4521 until IBIO*4522 has been completed.

*Prerequisite(s):* IBIO*4521  
*Department(s):* Department of Integrative Biology

**IBIO*4600 Integrative Marine and Freshwater Research F (3-3) [1.00]**
In this course, students will integrate theory and analytical methods to address common problems in marine and freshwater biology. Particular emphasis will be placed on the process of inquiry including: development of research problems, data retrieval from existing literature, design and interpretation of experiments, sampling, statistical inference, and written and oral presentation.

*Prerequisite(s):* BIOL*3450, (STAT*2040 or STAT*2230), (ZOO*3210 or ZOO*3610)  
*Restriction(s):* Restricted to students in BSCH:MBF.  
*Department(s):* Department of Integrative Biology
International Development

IDEV*1000 Understanding Development and Global Inequalities S,F,W (3-0) [0.50]
The objective of the course is to provide an introduction to the study of international development as a contested and evolving effort to counteract global inequalities. Students will learn about the historical and political origins of the international development system, as well as the main development actors and institutions. The course will provide an introduction to foundational concepts within development studies, including poverty, inequality, human rights, foreign aid, and sustainable development.
Offering(s): Also offered through Distance Education format.
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*2000 The Development Landscape: Actors and Institutions F (3-0) [0.50]
This course examines the local and global context within which inclusive and sustainable development takes place. It explores why particular economic, social, political, and institutional structures are in place and the implications of those structures for inclusive and sustainable development. Key issues will include global institutions, religion, the global economy, natural and physical environment, gender, urbanization, power structures, and architecture. Students will critically assess the conceptualization and methodologies used in development studies, as well as implications for policy, practice, and research.
Offering(s): First offering - Fall 2020
Prerequisite(s): IDEV*1000
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*2100 Research in International Development F (3-0) [0.50]
This course explores the ethical dimensions of conducting research and producing knowledge in a context of inclusive and sustainable development. Students will explore the cultural, methodological, and ethical challenges of conducting research in vulnerable communities, using concepts of positivism, difference, identity, and intersectionality to understand the ways in which they might engage in a mutually-respectful process of research and engagement. The course provides a broad survey of research methods, including documentary, observational, qualitative, and quantitative approaches, exploring their key characteristics, strengths and weaknesses and ethical implications of producing knowledge for development.
Offering(s): First offering - Fall 2020
Prerequisite(s): IDEV*1000
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*2300 Theoretical Perspectives on Development S,W (3-0) [0.50]
This course will explore alternative theoretical perspectives on inclusive and sustainable development, drawing from an interdisciplinary lens of economics, sociology, geography, and political science, amongst others. Students will examine how theoretical perspectives have changed over time and how they differ according to alternative disciplinary and philosophical perspectives. How dominant theoretical perspectives on development at any point in time influence policy and practice aimed at bringing about inclusive and sustainable development will also be explored.
Offering(s): First offering - Winter 2021
Prerequisite(s): ECON*1050, ECON*1100, IDEV*1000
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*2400 Development, Social Justice and Human Rights W (3-0) [0.50]
This course will explore the nature of social justice and links to concepts and practice of human rights. It examines how development can be seen in terms of the advancement of social justice. Students will identify and critically assess alternative approaches to promoting social justice within a development context and the related actions by actors locally and globally. It will explore the related ethical issues associated with development policy and practice. Key topics will include poverty, hunger, power, gender, race, and class.
Prerequisite(s): IDEV*1000
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*2500 International Development Studies W (4-0) [0.50]
This course is an introduction to a broad range of topics in international development as studied by various researchers and from perspectives of different social-sciences disciplines. Special emphasis will be placed on research arising from the seven areas of emphasis in the undergraduate IDS program, the integration of diverse disciplines and paradigms, and the implications for public policy. Students in the International Development major should complete this course before semester five.
Prerequisite(s): POLS*2080, ANTH*1150 or ECON*1050
Equate(s): IDEV*2010
Restriction(s): Registration in B.A. International Development major, minor or area of concentration.
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*2700 Poverty and Inequality W (3-0) [0.50]
This course explores the nature and determinants of poverty and inequality at the local and global levels and the interrelationship between these. It examines the patterns and dynamics of poverty and inequality, for example over time and geographically. In doing so, it explores the nature and practical application of alternative approaches to their assessment and measurement. Students will reflect on and critically assess diverse approaches to reducing poverty and inequality locally and globally.
Prerequisite(s): 7.50 credits including IDEV*2500
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*3100 Achieving Sustainable Development W (3-0) [0.50]
This course explores the environmental, social, and economic dimensions of sustainability and the interrelationships and trade-offs between sustainability and inclusive development. Alternative approaches for assessing and measuring sustainability will be covered. The course enables students to reflect and critically assess diverse approaches to promoting inclusive development that is sustainable locally to globally. Key issues might include climate change, urbanization, trade, extractive industries, conservation and eco-tourism, pollution, resource depletion, and water and sanitation.
Offering(s): First offering - Winter 2022
Prerequisite(s): 9.00 credits including IDEV*2000, IDEV*2100, IDEV*2300
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*3010 Case Studies in International Development F,W (3-0) [0.50]
This course is an in-depth examination of select case studies in international development.
Prerequisite(s): 10.00 credits including IDEV*2010 or IDEV*2500
Restriction(s): Registration in B.A. International Development major. Minimum of 68% overall cumulative average.
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*3000 Poverty and Inequality F (3-0) [0.50]
This course explores the nature and determinants of poverty and inequality at the local and global levels and the interrelationship between these. It examines the patterns and dynamics of poverty and inequality, for example over time and geographically. In doing so, it explores the nature and practical application of alternative approaches to their assessment and measurement. Students will reflect on and critically assess diverse approaches to reducing poverty and inequality locally and globally.
Prerequisite(s): 7.50 credits including IDEV*2500
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*3300 Engaging in Development Practice F,W (3-0) [0.50]
This course provides an opportunity for students to engage with development practitioners in a real-world context. Students will implement a community engagement project determined in consultation with a community partner. The focus of engagement opportunities will be on the analysis of a development issue and defining related policy and/or practice options. The course explores the challenges associated with engaging with development practitioners in the real world and equips students with the necessary skills for successful engagement.
Prerequisite(s): 7.50 credits including IDEV*2500
Restriction(s): Restricted to students in BAH.IDEV.
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*3300 Managing and Evaluating Change in Development W (3-0) [0.50]
This course explores the key practical skills required by those engaged in the implementation of development policy and practice including logical frameworks, theories of change, impact assessment, and project management. It aims to equip students with an understanding of the nature of these techniques, and how and where they are employed. The strengths and weaknesses of these techniques and their implications for development policy and practice are explored.
Prerequisite(s): 7.50 credits including IDEV*2500
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*3500 Field Course in Development Studies S (3-0) [1.00]
This course examines development within the context of an international or Canadian location, with the location varying each year. The course is comprised of an on-campus teaching component followed by a field trip during the summer semester. Topics may include poverty, food security, global migration, sustainable development, gender, community engagement. Information on the location and cost of the field school is available in the fall semester from the department with applications in January, prior to each summer offering.
Prerequisite(s): 7.50 credits
Restriction(s): A cumulative average of 70%. Instructor consent required.
Department(s): Dean's Office, College of Social and Applied Human Sciences
IDEV*4000 Development in Action F,W (3-0) [1.00]

This capstone course for the Major in International Development Studies course equips students to analyze complex issues in inclusive and sustainable development by applying and integrating the diverse theoretical and empirical concepts, approaches and ideas taught throughout their studies in International Development. Students will reflect on their personal positions and perspectives on development and drawing on their engagement experience. The course shows how different perspectives on sustainable and inclusive development can influence understanding and proposed solutions to development issues.

Offering(s): First offering - Fall 2022
Prerequisite(s): 14.00 credits including IDEV*2400, IDEV*3000, IDEV*3100, IDEV*3300
Restriction(s): Registration in B.A.IDS major. Minimum of 68% overall cumulative average. Instructor consent required.
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*4100 Thesis in International Development Studies I S,F,W (3-0) [0.50]

Supervised by a faculty member, students will undertake a literature review and plan, develop and write a research proposal. The topic of thesis will be selected in consultation with the supervisory faculty member prior to registration for the course. Students are advised to contact the IDS Academic Advisor for further information.

Offering(s): First offering - Fall 2022
Prerequisite(s): 14.00 credits including IDEV*3000, IDEV*3100
Restriction(s): Registration in B.A.IDS with a minimum average of 80% in all IDS major course attempts. Instructor consent required.
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*4150 Thesis in International Development Studies II S,F,W (3-0) [0.50]

Students conduct, write and present an undergraduate thesis under the supervision of a faculty member.

Offering(s): First offering - Winter 2023
Prerequisite(s): IDEV*4100
Restriction(s): Restricted to students in BAH.IDS. Instructor consent required.
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*4190 Regional Context S,F,W (1.5-0) [0.25]

In this course students will learn about a region that they intend to study further in an advanced work/study project (IDEV*4200) or in a structured semester abroad. It may be offered as a reading course or as a seminar.

Prerequisite(s): 10.00 credits including IDEV*2010 or IDEV*2500
Restriction(s): Instructor consent required. Written approval of the faculty advisor for International Development.
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*4200 Advanced Work/Study in International Development S,F,W (3-0) [0.75]

Individual work/study option at an advanced level. See IDEV*3200 for course description.

Prerequisite(s): IDEV*4190
Restriction(s): Instructor consent required. Written approval of the faculty advisor for International Development.
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*4500 International Development Seminar F,W (3-0) [1.00]

This course brings together students in international development in their final year of study to examine key debates and to integrate knowledge from different areas of emphasis in the specialization. Students draw from a variety of disciplinary and inter-disciplinary perspectives in lectures, text-based seminars and in reaction to guest speakers. In addition, students develop and present research projects which focus theoretical insight on practical concerns.

Prerequisite(s): 15.00 credits
Restriction(s): Registration in B.A International Development major. Minimum of 68% overall cumulative average.
Department(s): Dean's Office, College of Social and Applied Human Sciences

IDEV*4600 Advocating and Effecting Change in Development Policy and Practice S,F,W (3-0) [0.50]

This course aims to equip students with the knowledge and understanding needed to advocate for, and bring about, change in policy and practice that impact inclusive and sustainable development within government, civil society organizations and the private sector. The course examines the actions and processes through which changes in policy and practice take place, and the barriers that need to be overcome in order to effect such changes. These might include formal legal, political and administrative engagement, use of social media, protest, civil disobedience, etc. The course predominantly involves the in-depth analysis of successes and failures of advocacy and activism efforts at bringing about changes that have positive development impacts.

Offering(s): First offering - Fall 2022
Prerequisite(s): 14.00 credits including IDEV*2400, IDEV*3000, IDEV*3100, IDEV*3300
Department(s): Dean's Office, College of Social and Applied Human Sciences
### Italian Studies

*School of Languages and Literatures*

*Note: Literary texts are, at all levels, studied in the original language. Students registering in these courses will be expected to have the appropriate knowledge.*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Offerings</th>
<th>Restrictions</th>
<th>Prerequisites</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL*1060</td>
<td>Introductory Italian I F,W</td>
<td>(4-0) [0.50]</td>
<td>Also offered through Distance Education format.</td>
<td>Not available to students who have credit for 4U Italian or equivalent.</td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>ITAL*1070</td>
<td>Introductory Italian II W</td>
<td>(3-1) [0.50]</td>
<td>This course may not be taken by students who have OAC Italian or equivalent.</td>
<td>ITAL*1060</td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>ITAL*2090</td>
<td>Intermediate Italian F</td>
<td>(4-0) [0.50]</td>
<td></td>
<td>ITAL*1070</td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>ITAL*3060</td>
<td>Advanced Italian W</td>
<td>(3-0) [0.50]</td>
<td></td>
<td>ITAL*2090</td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>ITAL*3400</td>
<td>Renaissance Lovers and Fools F</td>
<td>(4-0) [0.50]</td>
<td></td>
<td>ITAL*3060</td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>ITAL*3700</td>
<td>Experiential Learning and Language S,F,W</td>
<td>(0-0) [0.50]</td>
<td></td>
<td>10.00 credits including 1.50 credits in Italian.</td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>ITAL*4900</td>
<td>Research Project in Italian Studies F,W</td>
<td>(3-0) [0.50]</td>
<td></td>
<td>ITAL<em>3060, ITAL</em>3400</td>
<td>School of Languages and Literatures</td>
</tr>
</tbody>
</table>
### Landscape Architecture

**School of Environmental Design and Rural Development**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC*1100</td>
<td>Introduction to Design and Communication Studio F (3-3) [0.75]</td>
<td>This course introduces the design process, creativity and communication skills.</td>
</tr>
<tr>
<td>LARC*1950</td>
<td>History of Cultural Form F (3-0) [0.50]</td>
<td>This course explores the historical roots of landscape design with an emphasis on the influence of past works.</td>
</tr>
<tr>
<td>LARC*2020</td>
<td>Foundational Design Studio W (2-4) [0.50]</td>
<td>This course is an introduction to the theory and process of spatial design.</td>
</tr>
<tr>
<td>LARC*2100</td>
<td>Landscape and Site Analysis F (2-2) [0.50]</td>
<td>This course is an introduction to biophysical factors and their influence on design.</td>
</tr>
<tr>
<td>LARC*2230</td>
<td>Planting Design W (1-2) [0.50]</td>
<td>This course introduces the visual, physical, and cultural characteristics of plants and their use.</td>
</tr>
<tr>
<td>LARC*2240</td>
<td>Plants in the Landscape F (1-2) [0.50]</td>
<td>This course explores the identification and requirements of native and introduced plants in cultivated and naturalized landscapes.</td>
</tr>
<tr>
<td>LARC*2410</td>
<td>Site Engineering F (3-1) [0.50]</td>
<td>This course introduces earthwork, circulation, drainage, and sub-grade utility networks and their design through site grading.</td>
</tr>
<tr>
<td>LARC*2420</td>
<td>Materials and Techniques W (3-0) [0.50]</td>
<td>This course is an introduction to the materials and techniques commonly used for landscape construction.</td>
</tr>
<tr>
<td>LARC*2820</td>
<td>Urban and Regional Planning W (3-0) [0.50]</td>
<td>This course introduces the evolution and history of planning and programming.</td>
</tr>
<tr>
<td>LARC*3040</td>
<td>Site Design Studio F (2-4) [0.75]</td>
<td>This course focuses on applying elements of the site planning process, including programming, site inventory analysis, conceptual design, functional analysis, and diagramming.</td>
</tr>
<tr>
<td>LARC*3050</td>
<td>Urban Design Studio W (2-4) [0.75]</td>
<td>This course provides lectures and projects that emphasize the integration of design theory, skills and knowledge using site scale and urban design projects.</td>
</tr>
<tr>
<td>LARC*3060</td>
<td>Landscape Rehabilitation Design Studio F (2-4) [0.75]</td>
<td>This course introduces students to regional and intermediate scale projects emphasizing conservation, development, and rehabilitation of landscapes.</td>
</tr>
<tr>
<td>LARC*3070</td>
<td>Urban and Community Design Studio F (2-6) [1.00]</td>
<td>This course provides exercises in design and master planning to provide an understanding of the integrative design process.</td>
</tr>
<tr>
<td>LARC*3080</td>
<td>Independent Study S,F,W (0-6) [0.50]</td>
<td>In this course each student establishes, in consultation with the faculty member chosen, the content of special study within the area of expertise of that instructor.</td>
</tr>
<tr>
<td>LARC*3090</td>
<td>Seminar W (3-0) [0.50]</td>
<td>This course provides an overview of professional issues involving practice, ethics, environmental concerns, government policy, research needs and professional responsibilities to society.</td>
</tr>
<tr>
<td>LARC*3100</td>
<td>Professional Practice F (3-0) [0.50]</td>
<td>This course is an exploration of the historical roots of landscape design.</td>
</tr>
<tr>
<td>LARC*3150</td>
<td>Honours Thesis F (3-0) [0.50]</td>
<td>This course provides an integrated overview of professional issues involving practice, ethics, environmental concerns, government policy, research needs and professional responsibilities to society.</td>
</tr>
</tbody>
</table>

**Restrictions:**
- LARC*3040, LARC*3430
- LARC*3050, LARC*3070
- LARC*3060, LARC*3080
- LARC*3090, LARC*3100
- LARC*3150

**Deposited by:**
- School of Environmental Design and Rural Development
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Description</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC*4620</td>
<td>Landscape Architecture Internship S,F,W (0-10) [1.00]</td>
<td>Students will engage in a paid experiential learning opportunity working in a professional office. Students are mentored in aspects of landscape architecture practice by a registered Landscape Architect and the program coordinator. Students are required to submit weekly reports and two reflective work experience papers.</td>
<td>LARC<em>3060, LARC</em>3440, LARC*4610</td>
<td>Instructor consent required.</td>
<td>School of Environmental Design and Rural Development</td>
</tr>
<tr>
<td>LARC*4710</td>
<td>Capstone Design Studio W (2-6) [1.00]</td>
<td>Students are required to submit a project work plan, prepare professional quality design and presentation drawings, and make formal presentations. Students are encouraged to select problems that require an interdisciplinary approach that integrate skills and knowledge obtained in previous courses to produce a comprehensive final design project.</td>
<td>LARC<em>3070, LARC</em>4510</td>
<td>Instructor consent required.</td>
<td>School of Environmental Design and Rural Development</td>
</tr>
<tr>
<td>LARC*4730</td>
<td>Special Study in Landscape Architecture S,F,W (0-4) [0.50]</td>
<td>This course is a faculty supervised independent study involving design competitions or other special projects and can be taught in either an individual or a group format.</td>
<td>LARC*3040</td>
<td>Instructor consent required.</td>
<td>School of Environmental Design and Rural Development</td>
</tr>
<tr>
<td>LARC*4740</td>
<td>Case Studies S,F,W (0-6) [0.50]</td>
<td>Students participate in a case study supervised by a faculty member. Travel and field studies may be involved and may entail additional costs. Students are required to submit a major paper or project.</td>
<td>LARC*3040</td>
<td>Instructor consent required.</td>
<td>School of Environmental Design and Rural Development</td>
</tr>
</tbody>
</table>
### Latin

**School of Languages and Literatures**

*Note: Literary texts are, at all levels, studied in the original language. Students registering in these courses will be expected to have the appropriate knowledge. Higher level courses in Latin are available as language modules attached to selected Classical Studies courses which are taken as double-weighted courses. (See Classical Studies course descriptions.)*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAT*1100 Preliminary Latin I F (3-0) [0.50]</td>
<td>A beginning course in Latin providing the fundamentals of structure and grammar.</td>
<td>Restriction(s): This course may not be taken by anyone who has Grade 12 Latin</td>
</tr>
<tr>
<td>LAT*1100 Preliminary Latin II W (3-0) [0.50]</td>
<td>A continuation of LAT*1100.</td>
<td></td>
</tr>
<tr>
<td>LAT*2000 Latin Literature F (3-0) [0.50]</td>
<td>A course in Latin literature based on relevant texts.</td>
<td>Prerequisite(s): Grade 12 Latin or LAT*1110</td>
</tr>
<tr>
<td>LAT*4100 Directed Readings in Latin Literature F (3-0) [0.50]</td>
<td>A reading course in Latin Literature designed according to the needs and the interests of the individual student.</td>
<td>Prerequisite(s): 1 of CLAS<em>3060, CLAS</em>3120, CLAS*3300</td>
</tr>
<tr>
<td>LAT*4150 Research Paper: Latin F,W (3-0) [0.50]</td>
<td>A major essay on an area of study to be determined in consultation with the Classics Faculty in the School.</td>
<td>Prerequisite(s): CLAS<em>3060 or CLAS</em>3120</td>
</tr>
</tbody>
</table>

| Department(s): | School of Languages and Literatures        |

---

2019-2020 Undergraduate Calendar

Last Revision: July 4, 2019
### Linguistics

**School of Languages and Literatures**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
<th>Offering(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING*1000</td>
<td>Introduction to Linguistics</td>
<td>3-0</td>
<td>The nature of language. An elementary survey of linguistic disciplines. Phonetics, morphology, syntax, semantics, language, and society.</td>
<td>Also offered through Distance Education format.</td>
<td>School of Languages and Literatures</td>
</tr>
<tr>
<td>LING*2400</td>
<td>Phonetics</td>
<td>3-0</td>
<td>This course studies central concepts in phonetics such as speech anatomy, acoustics, articulation, analysis and perception of vowels, consonants and suprasegmentals as well as the International Phonetic Alphabet.</td>
<td>Offered in even-numbered years.</td>
<td>School of Languages and Literatures</td>
</tr>
</tbody>
</table>

**Prerequisite(s):** LING*1000
Management

Department of Management
Department of Marketing and Consumer Studies
School of Hospitality, Food, and Tourism Management

MGMT*1000 Introduction to Business F (4-0) [1.00]
This course is intended for B.Comm. students in semester one. It provides students with an understanding of the evolution of forms of business organization and their role in social and economic development. The main focus is on current economic, social and environmental issues that impact business organizations and which, in turn, are impacted by business decisions. Ethical considerations and the concept of sustainability are essential components. Students develop oral and written communication skills in small seminar groups.
Restriction(s): CME*1000, MGMT*2150. Registration in BCOMM and fewer than 7.50 credits.
Department(s): School of Hospitality, Food and Tourism Management

MGMT*1100 Business Career Preparation F,W (1-0) [0.00]
This course is designed to provide students with knowledge and tools to enhance their career readiness skills, leading to a greater level of confidence and success when approaching the career search process. Students will be guided through a framework for career management and steps to create a personal “career toolkit”. This would include materials and resources such as a resume and cover letter, best practices for making more informed decisions about career paths, how to access to career opportunities and presenting themselves professionally to employers. The majority of the course will be delivered online via CourseLink, supplemented by two in-class activities. A pass/fail grade will be assigned upon completion of the course.
Prerequisite(s): 4.00 credits
Restriction(s): COOP*1100. Restricted to students in BCOMM with fewer than 10.00 credits. This is a Priority Access Course. Enrolment may be restricted to particular majors during certain periods.
Department(s): Dean's Office, Gordon S. Lang School of Business and Economics

MGMT*1290 Principles of Management W (3-0) [0.50]
This course provides an overview of the role of managers in the modern organization. Students will learn about the history of management theory and will examine in depth the major management functions of planning, leading, organizing, and controlling. The concepts of management ethics and sustainability are also introduced.
Offering(s): First offering - Winter 2020
Prerequisite(s): MGMT*1000
Department(s): Department of Management

MGMT*2150 Introduction to Canadian Business Management S,F,W (3-0) [0.50]
This is an introductory course in the fundamentals of business management in Canada. Students will be exposed to the basic functions of business and management. This course will also cover small business and entrepreneurship, forms of business ownership, competing in the global business environment and the economic and political realities of business in Canada today. Note: Students registered in the B.Comm program are required to select MGMT*1000 Introduction to Business.
Offering(s): Also offered through Distance Education format.
Equate(s): HTM*2150
Restriction(s): MGMT*1000
Restriction(s): Not available to students in the BCOMM program.
Department(s): School of Hospitality, Food and Tourism Management

MGMT*3020 Corporate Social Responsibility S,F,W (3-0) [0.50]
This course provides students an opportunity to examine a comprehensive range of topics and issues related to business and sustainability and aims to explore the implications of changing stakeholder expectations, and opportunities for organizational sustainable value creation. Key topics will include CSR theories and frameworks, global issues and role of business in society, socially responsible investing, green consumption, CSR and firm competitive advantage, reputation, corporate governance and ethics, regulation and social/environmental reporting.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 9.00 credits
Equate(s): BUS*3020
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Management

MGMT*3030 Managerial Communications and Team Leadership W (3-0) [0.50]
This course is designed to enhance managerial skills in interpersonal communication (both oral and written), team leadership and meeting facilitation through an intensive seminar experience. The content of the seminars are based on a review of the ‘great books’ of leadership and management. Students will collectively select, review, discuss, and debate the texts, and upon successful completion of the course will have further developed their skills in critical enquiry, consultation, evaluation, presentation, facilitation and leadership.
Prerequisite(s): 12.50 credits.
Restriction(s): Restricted to students in BCOMM Minimum of 70% cumulative average. Instructor consent required.
Department(s): School of Hospitality, Food and Tourism Management

MGMT*3140 Business Analytics S,F (3-0) [0.50]
Business analytics is an evidence-based approach to management decision-making using analytic tools to transform data into insight. This course will combine student’s existing math / statistics skills and business knowledge with modern analytic tools (spreadsheets and other applications) in order to develop a toolkit of analysis tools for solving a variety of business problems. Topics include data management and transformation, visualization, optimization, simulation, and regression. Descriptive, predictive, and prescriptive analytics will be covered.
Prerequisite(s): 9.00 credits including (1 of MATH*1030, MATH*1080, MATH*1200)
(1 of ECON*2740, PSYC*1010, STAT*2040, STAT*2060)
Restriction(s): Restricted to students in BCOMM. This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.
Department(s): Department of Management

MGMT*3200 Negotiation and Conflict Management F (3-0) [0.50]
This course teaches students about negotiation theory in addition to practical strategies and styles that can improve their conflict management and negotiation skills. The course covers conflict management from a variety of perspectives, including as first party and as third party skills.
Offering(s): First offering - Fall 2020
Prerequisite(s): HROB*2290, MGMT*1200
Department(s): Department of Management

MGMT*3300 Project Management F,W (3-0) [0.50]
This course provides students with an understanding of the concepts, principles, and practices for project management with special focus on planning, controlling, and managing projects to success. The course also emphasizes the techniques most frequently used in the context of both internal and external organizational roles of a project manager.
Prerequisite(s): MGMT*1200
Department(s): Department of Management

MGMT*3320 Financial Management S,F,W (3-0) [0.50]
The viewpoint taken in the course is that of the senior financial officer of a business firm. The focus is on the management of cash, accounts receivable, inventory and short and intermediate term liabilities. Emphasis is placed on the analysis and forecasting of financial statements, and financial modeling for planning and controlling the growth of the business enterprise.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 1 of ACCT*2230, BUS*2230, Hafa*3070, HTM*3070
Equate(s): BUS*3320
Restriction(s): Registration in BCOMM or BA.EURS area of emphasis in European Business Studies.
Department(s): Department of Management

MGMT*3400 Current Topics in Management S,F,W (3-0) [0.50]
This course provides a lecture, discussion or seminar program on a selected topic or current issue in management. The specific topic of the course will be identified on an ad hoc basis as contemporary issues and topics in management arise.
Prerequisite(s): 9.00 credits including (MGMT*1000 or MGMT*2150)
Restriction(s): BUS*4250, HTM*4200. Restricted to students in BCOMM and BA.EURS_EBS. This is a Priority Access Course. See department for more information.
Department(s): Department of Management
MGMT*4090 Strategic Management F,W (3-0) [0.50]

Strategic management is a synthesis of the principles of business management with emphasis upon the formation of business decisions and policies. The purpose of this course is to enable the student to draw on analytical tools and factual knowledge from other courses in analyzing comprehensive business problems and establishing viable plans and methods to implement the developed plans of action.

Prerequisite(s): (1 of ECON*2560, ECON*3460, ECON*3560), MGMT*3320, (1 of FARE*3310, HTM*3120, REAL*3890)

Restriction(s): BUS*4250, HTM*4200. Restricted to students in BCOMM and BAH.EURS_EBS. This is a Priority Access Course. See department for more information.

Department(s): School of Hospitality, Food and Tourism Management

MGMT*4020 Interdisciplinary Food Product Development I F (3-3) [0.50]

This is an interdisciplinary course that involves management, food science and human health and nutrition majors. This course requires interdisciplinary teams of students to develop new food products, services and business ventures for the agricultural and food industries. Processes include analyzing, planning, coordinating and implementing information required for the conception, promotion and distribution of new food products and marketing ideas designed to create and maintain beneficial exchanges between food and agricultural industries while meeting the expectations and demands of consumers and the economy.

Prerequisite(s): 14.00 credits, minimum 70% cumulative average

Restriction(s): FOOD*4260. Students in BCOMM, BSC:FOOD and BSC:NANS majors. Instructor consent required.

Department(s): Department of Marketing and Consumer Studies

MGMT*4030 Interdisciplinary Food Product Development II W (3-3) [0.50]

This is an interdisciplinary food product development course that involves management, food science and human health and nutrition majors. This course requires interdisciplinary teams of students to develop new food products, services and business ventures for the agricultural and food industries. Processes include analyzing, planning, coordinating and implementing information required for the conception, promotion and distribution of new food products and marketing ideas designed to create and maintain beneficial exchanges between food and agricultural industries while meeting the expectations and demands of consumers and the economy.

Prerequisite(s): MGMT*4020, minimum 70% cumulative average

Restriction(s): FOOD*4270. Students in BCOMM, BSC:FOOD and BSC:NANS majors. Instructor consent required.

Department(s): Department of Marketing and Consumer Studies

MGMT*4040 Advanced Topics in Management W (3-0) [0.50]

This advanced topics course provides a lecture-discussion or seminar program on a selected topic or issue in management. The specific topics covered in this course may change on an annual basis. The course topics will be announced prior to the course selection process.

Offering(s): First offering - Winter 2021

Prerequisite(s): 12.00 credits including MGMT*1200

Department(s): Department of Management

MGMT*4050 Business Consulting F,W (3-0) [0.50]

Offered through the Centre for Business and Student Enterprise (CBASe), this project-based course is designed to provide students with an opportunity to engage with community organizations by working as consultants in interdisciplinary teams, and to investigate and propose sustainable solutions to live cases put forth by real world clients. Project requirements will vary based on the needs of the assigned client.

Prerequisite(s): (1 of MCS*1000, MGMT*1000, MGMT*2150), 10.00 credits, minimum 70% cumulative average

Restriction(s): Instructor consent required.

Department(s): Department of Marketing and Consumer Studies

MGMT*4060 Business Consulting F,W (3-0) [0.50]

Offered through the Centre for Business and Student Enterprise (CBASe), this project-based course is designed to provide students with an opportunity to engage with community organizations by working as consultants in interdisciplinary teams, and to investigate and propose sustainable solutions to live cases put forth by real world clients. Project requirements will vary based on the needs of the assigned client.

Prerequisite(s): (1 of MCS*1000, MGMT*1000, MGMT*2150), 10.00 credits, minimum 70% cumulative average

Restriction(s): Instructor consent required.

Department(s): Department of Marketing and Consumer Studies

MGMT*4100 Management Decision Making F (3-0) [0.50]

This course is designed to improve decision-making skills and will examine the process of decision-making, taking into account complexity, risk and outcomes, and the impact of decisions on people, the community and the organization. The course also considers the role of rationality/non-rationality in decision-making and examine how uncertainty and ambiguity may influence managerial perceptions of choices and risks.

Offering(s): First offering - Fall 2020

Prerequisite(s): MGMT*3140, MGMT*3200

Department(s): Department of Management

MGMT*4200 Management Capstone W (3-0) [0.50]

This course examines management from a strategic perspective, focusing on how organizations can achieve competitive advantage through leveraging their resources. Students will be challenged to integrate their knowledge of management theories to develop strategic solutions to organizational issues.

Offering(s): First offering - Winter 2021

Prerequisite(s): HROB*3100, MGMT*3200

Equate(s): HROB*4000

Department(s): Department of Management

MGMT*4260 International Business W (3-3) [0.50]

This course covers international business and deals with the strategic and functional areas of management in the international business environment. This course examines the factors that shape strategic management outside a firm's domestic markets. It uses a mix of readings, lectures, case studies, individual and group projects.

Prerequisite(s): 14.50 credits

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

Department(s): Department of Management

MGMT*4350 Business Case Competition Preparation F (3-0) [0.50]

This course will focus on the critical analysis of current business practices through the use of case studies to develop integrative decision-making, negotiation and presentation skills. Strategy formulation and implementation will be investigated in the context of complex business case competitions.

Prerequisite(s): 9.50 credits.

Restriction(s): Restricted to students in BCOMM Minimum of 70% cumulative average. Instructor consent required.

Department(s): Department of Management

MGMT*4991 Management Thesis S,F,W (3-0) [1.00]

This two semester course represents the production of an undergraduate thesis in any management discipline. The thesis is an independent research project under the direct supervision of an individual faculty member. The research topic will be chosen in consultation with a faculty advisor, and will normally reflect the student’s major in the Bachelor of Commerce program. A departmental registration form must be obtained from the course coordinator and signed by the faculty advisor before students can be admitted into the course. This two-semester course is offered over any two consecutive semesters, with MGMT*4991 in the first semester and MGMT*4992 in the second semester. A grade will not be assigned in MGMT*4991 until MGMT*4992 has been completed.

Prerequisite(s): 14.00 credits

Restriction(s): Restricted to students in BCOMM Minimum of 70% cumulative average. Instructor consent required.

Department(s): Dean's Office, Gordon S. Lang School of Business and Economics, Department of Economics and Finance, Department of Food, Agriculture and Resource Economics, Department of Management, Department of Marketing and Consumer Studies, School of Hospitality, Food and Tourism Management
MGMT*4991/2 Management Thesis S,F,W (3-0) [1.00]

This two semester course represents the production of an undergraduate thesis in any management discipline. The thesis is an independent research project under the direct supervision of an individual faculty member. The research topic will be chosen in consultation with a faculty advisor, and will normally reflect the student’s major in the Bachelor of Commerce program. A departmental registration form must be obtained from the course coordinator and signed by the faculty advisor before students can be admitted into the course. This two-semester course is offered over any two consecutive semesters, with MGMT*4991 in the first semester and MGMT*4992 in the second semester. A grade will not be assigned in MGMT*4991 until MGMT*4992 has been completed.

Prerequisite(s): 14.00 credits
Restriction(s): Restricted to students in BCOMM Minimum of 70% cumulative average. Instructor consent required.
Department(s): Dean's Office, Gordon S. Lang School of Business and Economics, Department of Economics and Finance, Department of Food, Agricultural and Resource Economics, Department of Management, Department of Marketing and Consumer Studies, School of Hospitality, Food and Tourism Management

MGMT*4992 Management Thesis S,F,W (3-0) [1.00]

This two semester course represents the production of an undergraduate thesis in any management discipline. The thesis is an independent research project under the direct supervision of an individual faculty member. The research topic will be chosen in consultation with a faculty advisor, and will normally reflect the student’s major in the Bachelor of Commerce program. A departmental registration form must be obtained from the course coordinator and signed by the faculty advisor before students can be admitted into the course. This two-semester course is offered over any two consecutive semesters, with MGMT*4991 in the first semester and MGMT*4992 in the second semester. A grade will not be assigned in MGMT*4991 until MGMT*4992 has been completed.

Prerequisite(s): 14.00 credits, MGMT*4991
Restriction(s): Restricted to students in BCOMM Minimum of 70% cumulative average. Instructor consent required.
Department(s): Dean's Office, Gordon S. Lang School of Business and Economics, Department of Economics and Finance, Department of Food, Agricultural and Resource Economics, Department of Management, Department of Marketing and Consumer Studies, School of Hospitality, Food and Tourism Management
XII. Course Descriptions, Marketing and Consumer Studies

Marketing and Consumer Studies

Department of Marketing and Consumer Studies
For courses without semester designations, please check with the department. Advance schedules are available in the department.

MCS*1000 Introductory Marketing S,F,W (3-0) [0.50]
This course covers the marketing of both products and services. Students will be introduced to the theoretical concepts through lectures and class discussions and have the opportunity to apply these concepts through case analysis and discussion.
Offering(s): Also offered through Distance Education format.
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*2000 Business Communication in a Changing World F (3-0) [0.50]
This course provides an overview of business communication by reviewing and discussing key issues (such as ethics and globalization), and the components of a business plan. Weekly lectures are supplemented by discussions of business cases and hand-in assignments designed to introduce students to basic business communication skills.
Prerequisite(s): 4.00 credits including MCS*1000
Restriction(s): Registration in BCOMM.MKMN or BCOMM.MKMNC
Department(s): Department of Marketing and Consumer Studies

MCS*2000 Business Communication in a Changing World F (3-0) [0.50]
In this course students are introduced to the concepts and principles of information acquisition, manipulation and management as relevant to organizational decision-making. Experience in the evaluation of information technology applications used in organizations is provided.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 4.00 credits
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*2020 Information Management F,W (3-0) [0.50]
This introductory course is designed to help students develop and achieve their personal goals in financial management.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 5.00 credits
Equate(s): COST*2100
Department(s): Department of Marketing and Consumer Studies

MCS*2600 Fundamentals of Consumer Behaviour F,W (3-0) [0.50]
Organizations survive and achieve their goals by satisfying the needs and wants of consumers as well as or better than their competitors. This course examines consumer behaviours, the economic, social, cultural and psychological factors related to consumer behaviours, the evolution and change in behaviours and relationships, and the ways in which consumers respond to stimuli employed in the marketing of products, services and ideas.
Prerequisite(s): MCS*1000, (1 of BUS*2090, HROB*2090, HROB*2100, PSYC*1000, PSYC*1200). Although not required, it is recommended that students take PSYC*1000 prior to MCS*2600.
Restriction(s): Registration in BCOMM programs, BCOMM.MKTG minor, or BAH.EURS. This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*3000 Advanced Marketing F (3-0) [0.50]
This course provides students with an opportunity to extend their knowledge of the marketing principles and strategies learned in MCS*1000 to develop a marketing plan and to explore sales as a career.
Prerequisite(s): 10.00 credits including MCS*1000
Restriction(s): Not available to BCOMM students registered in BCOMM.MKMN, BCOMM.MKMNC, AGBU, AGBU.C majors.
Department(s): Department of Marketing and Consumer Studies

MCS*3010 Quality Management W (3-0) [0.50]
This course covers general concepts and expectations of quality assurance from consumer, government, managerial and technological points of view and examines the relationship of national and international groups concerned with quality assurance. Seminars apply concepts to selected products and services.
Prerequisite(s): 10.00 credits including (1 of ECON*2740, PSYC*1010, STAT*2040, STAT*2060, STAT*2080)
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*3020 Research Methods F,W (3-0) [0.50]
This course examines the concepts, principles and practices for consumer, market and product development research processes. Topics include research problem definition, research objectives, research design, measurement, sampling methods, execution, research management, analysis and interpretation, and report writing.
Prerequisite(s): 1 of ECON*2740, PSYC*1010, STAT*2060
Restriction(s): Registration in BCOMM.MKMN, BCOMM.MKMNC, BCOMM.REH, BCOMM.REH.C, or the BCOMM.MKMN, BCOMM.MKTG minor. This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*3040 Business and Consumer Law S,F,W (3-0) [0.50]
This course introduces students to statutory and common law concerning business and consumer transactions. An overview of the laws of contracts and torts forms the basis of business and product/service relationships. Discussion topics include sale of goods and consumer protection legislation; debtor-creditor relations; competition law; intellectual property rights and manufacturers' product liability.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 4.00 credits
Restriction(s): Registration in BCOMM program, BAH.BADM minor, or BA:EURS area of emphasis in European Business Studies. This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*3500 Marketing Analytics F,W (3-0) [0.50]
This course teaches students decision making theory and the methods of analysis that support decision making in the marketing discipline. Topics include customer, competitor and market analysis and methods such as forecasting and decision modeling.
Prerequisite(s): 10.00 credits including ECON*1050, (MATH*1000 or MATH*1030), MCS*2600, (1 of ECON*2740, PSYC*1010, STAT*2060)
Equate(s): MCS*3610
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*3600 Consumer Information Processes F,W (3-0) [0.50]
This course provides an in-depth treatment of information processing research and theories as they relate to consumer judgement and choice. Components of theory addressed include: attention and perception, motivation, processing capacity, encoding and memory storage, retrieval and decision processes. Applications to marketplace policy and strategy are discussed.
Prerequisite(s): 15.00 credits including MCS*2600, MCS*3030
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*3620 Marketing Communications F,W (3-0) [0.50]
This course covers concepts of communication management as practiced by organizations in all economic sectors. Communication management principles are applied to the design and evaluation of communication programs.
Prerequisite(s): 10.00 credits including MCS*1000, MCS*2600
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*4020 Research in Consumer Studies U (3-0) [0.50]
This course provides the opportunity for an independent investigation of a pertinent topic in consumer studies. Registration requires departmental approval.
Prerequisite(s): 15.00 credits including MCS*3030
Restriction(s): Registration in BCOMM.MKMN or BCOMM.MKMNC.C. Instructor consent required.
Department(s): Department of Marketing and Consumer Studies
XII. Course Descriptions, Marketing and Consumer Studies

MCS*4040 Management in Product Development F (3-0) [0.50]
The major components of this course are new product strategy formulation, the role of technical and market research, the analysis of opportunities, management of development processes, product launches, government and regulatory controls.
Prerequisite(s): 10.00 credits including MCS*1000, MCS*2600
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*4060 Retail Management F (3-0) [0.50]
This course encompasses a comprehensive view of the retailing sector and an application of marketing concepts in both the domestic and international retail marketplace. Key topics include retail format selection, retail management strategy, target shopper analysis, site selection, and merchandise planning. Additional focus will include the buying, financial analysis, and pricing activities involved in retail operations. The course will also investigate the evolving nature of e-commerce and retail supply chain management issues and opportunities.
Prerequisite(s): 14.00 credits including MCS*3600
Restriction(s): Registration in BCOMM.MKMN, BCOMM.MKMN.C. This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*4100 Entrepreneurship F (3-0) [0.50]
This course examines the role and effect of small business in Canada, and, in doing so, helps marketing students appreciate the challenges involved in having full responsibility for a business and/or for creatively moving a business forward. The course focuses on the analysis of entrepreneurial skills and, through the development of the business plan, the steps involved in starting a new venture or increasing the size of a business.
Prerequisite(s): 15.00 credits including MCS*3500
Restriction(s): Registration in BCOMM.MKMN or BCOMM.MKMN.C.
Department(s): Department of Marketing and Consumer Studies

MCS*4300 Marketing and Society W (3-0) [0.50]
This course focuses on how the dissemination of marketing knowledge can influence society through the decisions made by public policy makers, corporate decision makers and non-profit marketers. It also covers how the marketing decisions made and actions taken by corporate, non-profit and public sector decision makers can affect society. As the theme of 'reciprocal influence' is developed, both direct and indirect influences of marketing knowledge and marketing decisions are pursued.
Prerequisite(s): 15.00 credits including MCS*2600
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*4370 Marketing Strategy F,W (3-0) [0.50]
This course focuses on the decision-making role of the marketing manager who is responsible for formulating the strategic marketing plan. The theory of selecting market target(s) for the firm’s products and/or services and the development of the marketing mix (product, price, promotion, distribution) with the aid of market research and computerized information systems is covered.
Prerequisite(s): 15.00 credits including MCS*3030, MCS*3500
Equate(s): AGEC*4370, FARE*4370
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*4400 Pricing Management F (3-0) [0.50]
The objective of this course is to provide a useful conceptual framework as well as analytical techniques that can be applied in managing pricing functions. Topics to be covered include pricing strategies, tactical issues related to pricing, pricing methods, treatment of costs for pricing, consideration of competition, legal limitations and role of price in customer buying decisions for both consumer and industrial goods and services.
Prerequisite(s): 10.00 credits including (BCON*3740 or MCS*3030)
Restriction(s): MCS*3100. This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*4600 International Marketing F,W (3-0) [0.50]
This course examines the study of marketing in a global context with specific emphasis on the strategic implications of marketing in different country cultures. Included are the global marketing environment and the competitive challenges and opportunities confronting today’s international marketers, the cultural environment of global marketing, the assessment of global market opportunities and the development of global marketing strategies.
Prerequisite(s): 10.00 credits including MCS*3030
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.
Department(s): Department of Marketing and Consumer Studies

MCS*4910 Topics in Consumer Studies U (3-0) [0.50]
This course provides a lecture-discussion or seminar on a selected topic in consumer studies to be conducted by faculty with expertise in the area. Students should check with the department to determine what topic, if any, will be offered during a semester. Alternatively, they can ask a faculty member in MCS to supervise them as they study a topic or do a project of interest.
Prerequisite(s): 15.00 credits including MCS*2600
Restriction(s): Registration in the BCOMM.MKMN or BCOMM.REH major. Instructor consent required.
Department(s): Department of Marketing and Consumer Studies

MCS*4920 Topics in Consumer Studies U (3-0) [0.50]
This course provides a lecture-discussion or seminar on a selected topic in consumer studies to be conducted by faculty with expertise in the area. Students should check with the department to determine what topic, if any, will be offered during a semester. Alternatively, they can ask a faculty member in MCS to supervise them as they study a topic or do a project of interest.
Prerequisite(s): 15.00 credits including MCS*2600
Restriction(s): Registration in the BCOMM.MKMN or BCOMM.REH major. Instructor consent required.
Department(s): Department of Marketing and Consumer Studies

MCS*4950 Consumer Studies Practicum S,F,W (3-0) [0.50]
The practicum provides students with supervised experience in developing marketing plans or working on consumer studies projects.
Prerequisite(s): 15.00 credits including MCS*3030, MCS*3500, MCS*3620
Restriction(s): Registration in BCOMM.MKMN or BCOMM.MKMN.C. Instructor consent required.
Department(s): Department of Marketing and Consumer Studies
II. Course Descriptions, Mathematics

Mathematics

Department of Mathematics and Statistics

Suggested initial course sequence:

1. For students with 4U or OAC Calculus and expecting to pursue further studies in mathematics or the physical sciences: MATH*1200, MATH*1210.
2. For students interested in applications to the biological sciences: MATH*1080, MATH*2080.
3. For students not expecting to pursue further studies in mathematics: MATH*1030, 1 of 4U Advanced Functions, 4U Advanced Functions and Calculus.

MATH*1030 Business Mathematics F,W (3-0) [0.50]

Primarily intended for business and economics students, this course is designed to introduce and reinforce the essential mathematical skills needed to understand, analyze, and solve mathematical problems related to business and economics. Topics covered include basic algebra; functions, including a review of exponential and logarithmic functions; sequences and series with financial applications; limits; continuity; and differential calculus including derivatives, higher order derivatives, and curve sketching.

Offering(s): Also offered through Distance Education format.

Prerequisite(s): 4U Advanced Functions

Restriction(s): MATH*1080, MATH*1200 Not available to students registered in the BSC program.

Department(s): Department of Mathematics and Statistics

MATH*1080 Elements of Calculus I F,W (3-1) [0.50]

This course provides an introduction to the calculus of one variable with emphasis on mathematical modelling in the biological sciences. The topics covered include elementary functions, sequences and series, difference equations, differential calculus and integral calculus.

Prerequisite(s): 1 of 4U Advanced Functions, 4U Advanced Functions and Calculus or equivalent

Restriction(s): IPS*1500, MATH*1200

Department(s): Department of Mathematics and Statistics

MATH*1090 Elements of Calculus II W (3-1) [0.50]

This course will expand on integration techniques, and introduce students to difference and differential equations, vectors, vector functions, and elements of calculus of two or more variables such as partial differentiation and multiple integration. The course will emphasize content relevant to analyzing biological systems, and methods will be illustrated by application to biological systems.

Prerequisite(s): 1 of IPS*1500, MATH*1080, MATH*1200

Restriction(s): IPS*1510, MATH*1210, MATH*2080

Department(s): Department of Mathematics and Statistics

MATH*1160 Linear Algebra I F,W (3-0) [0.50]

This course provides an introduction to linear algebra in Euclidean space. Topics covered include: N-dimensional vectors, dot product, matrices and matrix operations, systems of linear equations and Gaussian elimination, linear independence, subspaces, basis and dimension, matrix inverse, matrix rank and determinant, eigenvalues, eigenvectors and diagonalization, orthogonality and projections, linear transformations. Some fundamental proofs and applications of these topics will be included.

Prerequisite(s): 4U Calculus and Vectors or 4U Advanced Functions

Restriction(s): ENGG*1500, MATH*2150, MATH*2160

Department(s): Department of Mathematics and Statistics

MATH*1200 Calculus I F (3-1) [0.50]

This is a theoretical course intended primarily for students who expect to pursue further studies in mathematics and its applications. Topics include inequalities and absolute value; compound angle formulas for trigonometric functions; limits and continuity using rigorous definitions; the derivative and derivative formulas (including derivatives of trigonometric, exponential and logarithmic functions); Fermat's theorem; Rolle's theorem; the mean-value theorem; applications of the derivative; Riemann sums; the definite integral; the fundamental theorem of calculus; applications of the definite integral; the mean value theorem for integrals.

Prerequisite(s): 1 of 4U Calculus and Vectors, 4U Advanced Functions and Calculus or Grade 12 Calculus

Restriction(s): IPS*1500, MATH*1080

Department(s): Department of Mathematics and Statistics

MATH*1210 Calculus II W (3-1) [0.50]

This course is a continuation of MATH*1200. It is a theoretical course intended primarily for students who need or expect to pursue further studies in mathematics, physics, chemistry, engineering and computer science. Topics include inverse functions, inverse trigonometric functions, hyperbolic functions, indeterminate forms and l'Hospital's rule; techniques of integration, parametric equations, polar coordinates, Taylor and Maclaurin series; functions of two or more variables, partial derivatives, and if time permits, an introduction to multiple integration.

Prerequisite(s): MATH*1080 or MATH*1200

Restriction(s): IPS*1510, MATH*1090, MATH*2080

Department(s): Department of Mathematics and Statistics

MATH*2000 Proofs, Sets, and Numbers F (3-1) [0.50]

This course exposes the student to formal mathematical proof, and introduces the theory of sets and number systems. Topics include relations and functions, number systems including formal properties of the natural numbers, integers, and the real and complex numbers. Equivalence relations and partial and total orders are introduced. The geometry and topology of the real number line and Cartesian plane are introduced. Techniques of formal proof are introduced including well-ordering, mathematical induction, proof by contradiction, and proof by construction. These techniques will be applied to fundamental theorems from linear algebra.

Prerequisite(s): 1 of IPS*1500, MATH*1080, MATH*1160, MATH*1200

Department(s): Department of Mathematics and Statistics

MATH*2130 Numerical Methods W (3-1) [0.50]

This course provides a theoretical and practical introduction to numerical methods for approximating the solution(s) of linear and nonlinear problems in the applied sciences. The topics covered include: solution of a single nonlinear equation; polynomial interpolation; numerical differentiation and integration; solution of initial value and boundary value problems; and the solution of systems of linear and nonlinear algebraic equations.

Prerequisite(s): (CIS*1300 or CIS*1500), (1 of IPS*1510, MATH*1090, MATH*1210, MATH*2080)

Department(s): Department of Mathematics and Statistics

MATH*2200 Advanced Calculus I F (3-0) [0.50]

The topics covered in this course include infinite sequences and series, power series, tests for convergence, Taylor's theorem and Taylor series for functions of one variable, planes and quadratic surfaces, limits, and continuity, differentiability of functions of two or more variables, partial differentiation, directional derivatives and gradients, tangent planes, linear approximation, Taylor's theorem for functions of two variables, critical points, extreme value problems, implicit function theorem, Jacobians, multiple integrals, and change of variables.

Prerequisite(s): 1 of IPS*1510, MATH*1090, MATH*1210, MATH*2080

Department(s): Department of Mathematics and Statistics

MATH*2210 Advanced Calculus II W (3-0) [0.50]

This course continues the study of multiple integrals, introducing spherical and cylindrical polar coordinates. The course also covers vector and scalar fields, including the gradient, divergence, curl and directional derivative, and their physical interpretation, as well as line integrals and the theorems of Green and Stokes.

Prerequisite(s): MATH*2200

Department(s): Department of Mathematics and Statistics

MATH*2270 Applied Differential Equations F (3-1) [0.50]

This course covers the solution of differential equations that arise from problems in engineering and science. Topics include linear equations of first and higher order, systems of linear equations, Laplace transforms, series solutions of second-order equations, and an introduction to partial differential equations.

Prerequisite(s): (1 of ENGG*1500, MATH*1160, MATH*2150, MATH*2160), (1 of IPS*1510, MATH*1090, MATH*1210, MATH*2080)

Restriction(s): MATH*2170

Department(s): Department of Mathematics and Statistics

MATH*3100 Differential Equations II W (3-1) [0.50]

This course continues the study of differential equations. Power series solutions around regular singular points including Bessel equations are presented. First order linear systems and their general solution by matrix methods are thoroughly covered. Nonlinear systems are introduced along with the concepts of linearization, stability of equilibria, phase plane analysis, Lyapunov's method, periodic solutions and limit cycles. Two-point boundary value problems are discussed and an introduction to linear partial differential equations and their solution by separation of variables and Fourier series is given.

Prerequisite(s): (1 of MATH*1160, MATH*2150, MATH*2160), (MATH*2170 or MATH*2270)

Department(s): Department of Mathematics and Statistics
MATH*3130 Abstract Algebra F (3-0) [0.50]
This course is an introduction to abstract algebra, covering both group theory and ring theory. Specific topics covered include an introduction to group theory, permutations, symmetric and dihedral groups, subgroups, normal subgroups and factor groups. Group theory continues through the fundamental homomorphism theorem. Ring theory material covered includes an introduction to ring theory, subrings, ideals, quotient rings, polynomial rings, and the fundamental ring homomorphism theorem.
Offering(s): Offered in even-numbered years.
Prerequisite(s): MATH*2000, (1 of MATH*1160, MATH*2150, MATH*2160)
Department(s): Department of Mathematics and Statistics

MATH*3160 Linear Algebra II W (3-0) [0.50]
The topics in this course include complex vector spaces, direct sum decompositions of vector spaces, the Cayley-Hamilton theorem, the spectral theorem for normal operators and the Jordan canonical form.
Prerequisite(s): (MATH*1160 or MATH*2160), 1.00 credits in MATH or STAT at the 2000 level or above
Department(s): Department of Mathematics and Statistics

MATH*3200 Real Analysis F (3-0) [0.50]
This course provides a basic foundation for real analysis. The rigorous treatment of the subject in terms of theory and examples gives students the flavour of mathematical reasoning and intuition for other advanced topics in mathematics. Topics covered include the real number line and the supremum property; metric spaces; continuity and uniform continuity; completeness and compactness; the Banach fixed-point theorem and its applications to ODEs; uniform convergence and the rigorous treatment of the Riemann integral.
Prerequisite(s): MATH*2000, MATH*2210, (MATH*1160 or MATH*2160)
Department(s): Department of Mathematics and Statistics

MATH*3260 Complex Analysis W (3-0) [0.50]
This course extends calculus to cover functions of a complex variable; it introduces complex variable techniques which are very useful for mathematics, the physical sciences and engineering. Topics include complex differentiation, planar mappings, analytic and harmonic functions, contour integration, Taylor and Laurent series, the residue calculus and its application to the computation of trigonometric and improper integrals, conformal mapping and the Dirichlet problem.
Prerequisite(s): MATH*2200
Department(s): Department of Mathematics and Statistics

MATH*3510 Biomathematics W (3-0) [0.50]
This is a course in mathematical modelling which has applications to engineering, economics, business and logistics. Topics covered include linear programming and the simplex method, network models and the shortest path, maximum flow and minimal spanning tree problems as well as a selection of the following: non-linear programming, constrained optimization, deterministic and probabilistic dynamic programming, game theory and simulation.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): (1 of MATH*1160, MATH*2150, MATH*2160), 0.50 credits in statistics
Co-requisite(s): MATH*2200
Department(s): Department of Mathematics and Statistics

MATH*4060 Topics in Mathematics II W (3-0) [0.50]
In this course students will discuss selected topics at an advanced level as in MATH*4050, but with different choice of topic.
Offering(s): Offered in even-numbered years.
Prerequisite(s): MATH*3200
Department(s): Department of Mathematics and Statistics

MATH*4150 Topics in Mathematics III F,W (3-0) [0.50]
In this course students will discuss selected topics at an advanced level as in MATH*4050, but with different choice of topics.
Prerequisite(s): MATH*3200
Department(s): Department of Mathematics and Statistics

MATH*4200 Advanced Analysis W (3-0) [0.50]
This course focuses on first and second-order partial differential equations, with examples and applications from selected fields such as physics, engineering and biology. Topics may include the wave equation, the heat equation, Laplace's equation, linearity and separation of variables, solution by Fourier series, Bessel, Legendre and Green's functions, an introduction to the method of characteristics and Fourier transforms. The classification of linear second-order partial differential equations is discussed.
Offering(s): Offered in even-numbered years.
Prerequisite(s): MATH*3200
Department(s): Department of Mathematics and Statistics

MATH*4240 Advanced Topics in Modeling and Optimization F (3-0) [0.50]
This course is a study of advanced topics in the areas of optimization and modeling. Topics may include continuous and discrete models together with techniques for their analysis and design, and optimization topics such as game theory, networks, nonlinear problems, Markov chains, queuing theory, agent-based models, computational intelligence based techniques and computational optimization techniques.
Prerequisite(s): 0.50 credits in Mathematics at the 3000 level.
Department(s): Department of Mathematics and Statistics

MATH*4270 Partial Differential Equations F (3-0) [0.50]
This course covers the fundamentals of applying mathematical modelling techniques to understanding and predicting the dynamics of biological systems. Students will learn the development, analysis, and interpretation of mathematical models based on discrete-time and continuous-time models. Applications may include examples from population biology, ecology, infectious diseases, microbiology, and genetics.
Prerequisite(s): (1 of MATH*1160, MATH*2150, MATH*2160), (MATH*2170 or MATH*2270)
Department(s): Department of Mathematics and Statistics

MATH*4310 Combinatorics and Graph Theory W (3-0) [0.50]
This course is an introduction to combinatorics with a focus that includes graph theory. Specific topics covered are enumerative combinatorics up to inclusion-exclusion, the theory of simple graphs, Latin squares and orthogonal Latin squares, and introductory coding theory. Instructors may continue to one or more of the Polya theory of counting, graph coloring and embedding, combinatorial design theory, Ramsey theory, or advanced topics in enumerative combinatorics.
Offering(s): First offering - Winter 2021 Offered in odd-numbered years.
Prerequisite(s): 10.00 credits including MATH*2000
Department(s): Department of Mathematics and Statistics

MATH*4440 Case Studies in Mathematics and Statistics W (3-0) [0.50]
This course introduces students to the capabilities of technology in solving complex mathematical and statistical problems. The course will focus on case studies drawn from engineering, computer science, biology, life and physical sciences, medicine, and/or economics.
Prerequisite(s): At least 3.0 mathematics and/or statistics credits at the 3000 level or above.
Restoration(s): Restricted to students in the Mathematical Science major.
Department(s): Department of Mathematics and Statistics

MATH*4600 Advanced Research Project in Mathematics F,W (0-6) [1.00]
Each student in this course will undertake an individual research project in some area of mathematics, under the supervision of a faculty member. A written report and a public presentation of the project will be required.
Restriction(s): Approval of a supervisor and the course coordinator.
Department(s): Department of Mathematics and Statistics
Microbiology
School of Environmental Sciences
Department of Molecular and Cellular Biology
Department of Pathobiology

MICR*2420 Introduction to Microbiology S,F,W (3-3) [0.50]
This course will introduce students to the diversity of microorganisms, including, bacteria, viruses, and fungi, and the impact of microbes on everyday life. The interactions of microorganisms with the biotic and abiotic worlds will be discussed. Topics will include the roles of microorganisms in host-pathogen interactions in disease, the beneficial aspects of microorganisms in bioremediation and food production, and their application in biotechnology.
Prerequisite(s): 4.00 credits including (1 of BIOL*1070, BIOL*1080, BIOL*1090, CHEM*1040)
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Molecular and Cellular Biology

MICR*2430 Methods in Microbial Culture and Physiology F,W (1.5-3) [0.50]
This course uses a hands-on approach to investigate microbial growth and factors that impact growth and the interactions of microbes with biotic and abiotic environments. This course will explore the ecological diversity of microorganisms of selected environments. Students will develop a wide range of microbiology-related laboratory skills.
Prerequisite(s): MICR*2420
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Molecular and Cellular Biology

MICR*3090 Mycology F (3-3) [0.50]
This course provides an introduction to the fungal lifestyle and to classification and evolution of the major groups of fungi, including microfungi, yeasts and other eukaryotic microbes. The characteristics of fungal cell structure, genetics and metabolism will be presented, and fungal reproduction and sporulation processes discussed with reference to the life cycles of representative forms. The ecological and economic importance of fungi will be demonstrated by considering fungal ecology, symbiotic relationships, mycotoxins and pathogenic fungi and industrial applications of fungi and yeasts. Laboratory work will provide familiarity with procedures for culturing, examining and identifying fungi and yeasts.
Prerequisite(s): BOT*2100 or MICR*2430
Equate(s): BIOL*3050
Department(s): Department of Molecular and Cellular Biology

MICR*3220 Plant Microbiology F (3-0) [0.50]
In this course the interaction between plants and microorganisms will be studied. Topics include molecular plant-microbe interactions, plant defenses, bacterial ice nucleation, interaction among plant microbes, root noduleation, mycorrhizae, wood decay, and decomposition of plant litter.
Prerequisite(s): BIOL*1070, BIOL*1090
Department(s): School of Environmental Sciences

MICR*3230 Immunology F (3-0) [0.50]
This course provides an introduction to the immune response of the vertebrate host, the cells and tissues of the lymphoid system, humoral and cell-mediated immunity, the concept of immunity to diseases and current techniques in immunology.
Prerequisite(s): BIOL*1090, BIOC*2580
Department(s): Department of Molecular and Cellular Biology, Department of Pathobiology

MICR*3260 Microbial Adaptation W (3-1) [0.50]
In this course students examine the physiological responses of bacteria to their diverse and changing environments. By using information technologies to access and analyze the relevant research literature, students learn how and why researchers study this subject, and how research outcomes are evaluated.
Prerequisite(s): BIOC*3560, MBG*3080
Department(s): Department of Molecular and Cellular Biology

MICR*3330 World of Viruses F (3-0) [0.50]
Viruses infecting many organisms will be covered in the context of their global impact on disease and history, beneficial uses of viruses, and their role in advances of molecular theory. A fundamental virology background will be achieved by understanding the diversity of viruses, their replication strategies and their interactions with the host in disease. The relevance of viruses in society will be highlighted by discussion of historical accounts and contemporary news articles.
Prerequisite(s): MCB*2050
Department(s): Department of Molecular and Cellular Biology

MICR*3420 Microbial Diversity and Ecology F (3-0) [0.50]
The cycling of elements (carbon, nitrogen, sulphur) within ecosystems involves the contributions of diverse microorganisms. This course will study the diversity of predominately Bacteria and Archaea in selected ecosystems at an organismal level, investigate the metabolic and enzymatic diversity in microbes that contribute to and thrive within these environments, and examine the methodologies used to study the relationships and evolution of microorganisms within an ecosystem.
Prerequisite(s): BIOC*3560, MBG*2040, MICR*2430
Department(s): Department of Molecular and Cellular Biology

MICR*3430 Advanced Methods in Microbiology W (1-6) [0.75]
This course will use a hands-on approach to investigate concepts and develop skills needed for the isolation, identification and classification of microorganisms. Classical, molecular, and bioinformatic techniques will be used to isolate and identify bacteria and viruses from natural environments.
Prerequisite(s): MBG*3080, MICR*2430
Co-requisite(s): MBG*3350
Department(s): Department of Molecular and Cellular Biology

MICR*4010 Pathogenic Microbiology W (3-0) [0.50]
This course focuses on the interactions between microbial pathogens and host animals, including immune and inflammatory responses of the host’s defense mechanisms. The structural and physiological characteristics of a number of important microbes causing human and animal diseases are considered.
Prerequisite(s): MBG*3080, MCB*2050, MICR*3230
Department(s): Department of Molecular and Cellular Biology

MICR*4330 Molecular Virology W (2-3) [0.50]
This course will focus on molecular aspects of virus replication cycles and the diverse strategies used for replication of select RNA and DNA viruses. Virus-host interactions including tumour virology and host antiviral responses such as interferon and apoptosis will be discussed. Viral anti-host defence responses as well as recent advances in molecular virology and evolution will be also be covered.
Prerequisite(s): MICR*3330, (MICR*2430 is recommended)
Department(s): Department of Molecular and Cellular Biology

MICR*4430 Medical Virology W (3-0) [0.50]
This course is designed to present an overview of the major viruses causing important diseases in humans. The course focuses on the molecular mechanisms of viral pathogenesis, determinants of viral virulence and the host response to infections. Diagnosis of viral infections, vaccines and controls of viral infections are also discussed. The first part of the course will cover the basic principles and concepts used in the study of viral diseases, modern diagnostic methods and recent advances in the application of molecular virology to the development of recombinant vaccines and other means to combat viral diseases. The second half of the course will include material on the individual diseases and caustive viruses.
Prerequisite(s): MICR*3330
Department(s): Department of Pathobiology

MICR*4520 Microbial Cell Biology F (3-0) [0.50]
This course explores the structure-function relationships of macromolecular complexes and cellular ultrastructures involved in fundamental microbial processes. The structures of macromolecular machines will be considered from the perspective of the cellular requirements for survival in different environments, and will be discussed in the context of their integration into cell division and the bacterial cell cycle, as well as their exploitation as targets for antibiotics and other therapeutic approaches.
Prerequisite(s): BIOC*3560, MBG*3080
Department(s): Department of Molecular and Cellular Biology
MICR*4530 Immunology II W (3-0) [0.50]

This course will focus on advanced aspects of the structure and function of the vertebrate immune system in health and disease. Various topics including inflammation, hypersensitivity reactions, immune-mediated diseases such as allergy and autoimmunity, immune response to infection, vaccine development, experimental systems, immunoinformatics and antibody engineering will be discussed.

Prerequisite(s): MICR*3230

Department(s): Department of Molecular and Cellular Biology
Molecular and Cellular Biology

Department of Molecular and Cellular Biology

**MB*C2580 Molecular Biology of the Cell F,W (4-0) [0.50]**

This course will develop an understanding of the key concepts of the molecular biology of the cell, integrating principles of cell structure and function with the underlying molecular mechanisms. Discussions will focus on aspects of gene regulation, genomics, cell cycle control, protein synthesis, intracellular protein trafficking and protein degradation in eukaryotic cells. Many of these concepts will be discussed in the context of how defects in cellular processes give rise to disease.

**Prerequisite(s):** BIOC*2580, MBG*2040

**Department(s):** Department of Molecular and Cellular Biology

**MCB*3010 Dynamics of Cell Function and Signaling W (3-0) [0.50]**

This course examines the dynamic properties of cells as they relate to cell-cell and cell-substrate interactions and elaborates on the fundamentals of intracellular signal transduction during these interactions. Topics will include the function and regulation of signalling modules, the cytoskeleton, and membrane component in the context of cellular interactions with other cells and with the extracellular matrix. These concepts will be integrated to develop a deeper understanding of dynamic cellular function within different tissue environments and physiological settings.

**Prerequisite(s):** BIOC*3560, MCB*2050

**Department(s):** Department of Molecular and Cellular Biology

**MCB*4010 Advanced Cell Biology W (3-0) [0.50]**

This course examines the cellular and molecular biology of signal transduction. The major theme is an understanding of how eukaryotic cells receive, transmit and respond to environmental signals. Topics will include cellular regulation of cell cycle progression and cell death as well as the consequences of deregulated signal transduction in terms of disease, primarily cancer.

**Prerequisite(s):** MCB*3010

**Department(s):** Department of Molecular and Cellular Biology

**MCB*4050 Protein and Nucleic Acid Structure F (3-0) [0.50]**

This course explores the relationship between the functions and the three dimensional structures of DNA, RNA and proteins. Topics covered include how these structures are determined, the principles governing their folding and architecture, why some proteins don’t fold at all, and the use of these structures to guide drug discovery. Practical skills are emphasized, including the use of bioinformatics and visualisation tools to analyse sequences and structures.

**Prerequisite(s):** BIOC*3560

**Department(s):** Department of Molecular and Cellular Biology

**MCB*4500 Research Project in Molecular & Cellular Biology S,F,W (0-12) [1.00]**

This course involves independent research of a practical or theoretical nature on a specific topic in molecular and cellular biology. It is carried out under the supervision of an individual faculty member. Students should make arrangements with both a faculty advisor and the course coordinator at least one semester in advance of taking the course.

The signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from, and submitted to, the course coordinator no later than the 2nd class day of the semester in which the student is registered for the course.

**Prerequisite(s):** MCB*4500. Normally, students must have completed 6 semesters in an appropriate program in the biological sciences. Minimum 70% cumulative average in science courses during the first 6 semesters of the relevant majors.

**Restriction(s):** Students in programs offering project courses cannot enroll in MCB*4510. Grade requirements may be waived in exceptional circumstances at the discretion of faculty advisor and course coordinator. Course coordinator consent required.

**Department(s):** Department of Molecular and Cellular Biology

**MCB*4510 Research Project in Molecular & Cellular Biology S,F,W (0-12) [1.00]**

This course involves independent research of a practical or theoretical nature on a specific topic in molecular and cellular biology. It is carried out under the supervision of an individual faculty member. Students should make arrangements with both a faculty advisor and the course coordinator at least one semester in advance of taking the course.

The signature of the course coordinator will be required to select the course. A departmental registration form must be obtained from, and submitted to, the course coordinator no later than the 2nd class day of the semester in which the student is registered for the course.

**Prerequisite(s):** MCB*4500. Normally, students must have completed 6 semesters in an appropriate program in the biological sciences. Minimum 70% cumulative average in science courses during the first 6 semesters of the relevant majors.

**Restriction(s):** Students in programs offering project courses cannot enroll in MCB*4510. Grade requirements may be waived in exceptional circumstances at the discretion of faculty advisor and course coordinator. Course coordinator consent required.

**Department(s):** Department of Molecular and Cellular Biology

**MCB*4600 Topics in Molecular and Cellular Biology S,F,W (1-3) [0.50]**

This course involves independent study of a current topic in Molecular and Cellular Biology, selected from the recent research literature and involving a review and critical appraisal of the area. The course comprises independent library research, participation in weekly meetings, and written and oral presentations. Students should make arrangements with both faculty advisor and the course coordinator in a prior course selection period.

**Prerequisite(s):** MCB*4510. Grade requirements may be waived in exceptional circumstances at the discretion of faculty advisor. Normally, students must have a minimum of 3.00 credits in 3000 or 4000 level BIOC, MBG, MCB OR MCR courses.

**Restriction(s):** Students in programs offering topics courses cannot enroll in MCB*4600. Coordinator consent required.

**Department(s):** Department of Molecular and Cellular Biology
Molecular Biology and Genetics

Department of Animal Biosciences
Department of Molecular and Cellular Biology
Department of Plant Agriculture
Department of Integrative Biology

MBG*1000 Genetics and Society W (3-1) [0.50]
This course covers the basic principles of genetics in human society. The roles of genes and inheritance in the biology of humans and the organisms with which we interact. Introduction to some of the social and ethical consequences of genetic knowledge and practice. This is a science course designed primarily for students in the Arts or Social and Applied Human Sciences.
Restriction(s): Students in the BAS, BSC and BSC(ENV) program cannot take this course for credit.
Department(s): Department of Molecular and Cellular Biology

MBG*2040 Foundations in Molecular Biology and Genetics F,W (4-0) [0.50]
This course will develop an understanding of the fundamental concepts in genetics, including patterns of inheritance, allelic variation, gene interaction, linkage, gene mapping and changes in chromosome structure and number. This will be followed by in-depth discussions on gene structure, replication, transcription, translation, recombination, mutation and DNA repair, and an introduction to gene regulation.
Prerequisite(s): 4.00 credits including BIOL*1090
Department(s): Department of Molecular and Cellular Biology

MBG*2400 Fundamentals of Plant and Animal Genetics F (3-2) [0.50]
Fundamental aspects of plant and animal genetics are covered in this course including the chromosomal basis of inheritance, natural and artificial selection, domestication, epigenetics and quantitative traits. Population dynamics and the effect of selection on allele frequencies will be introduced with examples from agricultural crop and animal species and companion animal species. Genomics will be introduced with an emphasis on the development and use of molecular genetic markers in marker assisted selection.
Prerequisite(s): (BIOL*1050 or BIOL*1070), BIOL*1090
Department(s): Department of Animal Biosciences

MBG*3040 Molecular Biology of the Gene F (3-0) [0.50]
In this course, the structure, expression, control and modification of eukaryotic genes will be discussed with an emphasis on the underlying mechanisms and structure/function relationships. Many topics covered in introductory courses are included but discussed at a more advanced level. Students will have the opportunity to learn current genetic concepts and principles through lectures, as well as the application of this knowledge in the real world through primary literature reading and group research projects.
Prerequisite(s): MCB*2050
Restriction(s): MBG*4080
Department(s): Department of Molecular and Cellular Biology

MBG*3050 Human Genetics W (3-3) [0.50]
This course is designed to introduce the student to the study of biological inheritance in humans. The course includes discussion of the genetic basis of human individual differences, gene frequencies in human populations, human behavioral genetics, human cytogenetics, biochemical genetics and developmental genetics, medical genetics and other aspects of human heredity.
Prerequisite(s): MCB*2050
Department(s): Department of Molecular and Cellular Biology

MBG*3060 Quantitative Genetics W (3-0) [0.50]
This course examines the nature of Mendelian inheritance when extended to quantitative traits that are jointly influenced by the environment and the simultaneous segregation of many genes. Prediction of response to natural and artificial selection in populations will also be studied.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): MBG*2400, 0.50 credits in statistics
Department(s): Department of Animal Biosciences

MBG*3080 Bacterial Genetics F (3-0) [0.50]
This course focuses on the genetics of prokaryotic microorganisms and their viruses. Some major topics covered are: regulation of gene expression, analysis of bacterial and phage genomes, plasmids, transposable elements, and mutation studies.
Prerequisite(s): MBG*2040, MICR*2420
Department(s): Department of Molecular and Cellular Biology

MBG*3100 Plant Genetics W (3-2) [0.50]
This course examines reproduction in plants, genome organization, organelle and polyploid genetics, and analyses of mutations, genetic variation and linkage with classical and modern approaches.
Prerequisite(s): (MBG*2040 or MBG*2400), STAT*2040
Department(s): Department of Plant Agriculture

MBG*3350 Laboratory Methods in Molecular Biology S,F,W (1.5-8) [0.75]
This course involves laboratory based instruction in the basic methodologies of Molecular Biology. Students will have the opportunity to develop technical skills and practical knowledge sufficient to perform basic procedures independently, and to diagnose and analyze experimental results obtained with these techniques.
Prerequisite(s): BIOC*2580, MCB*2050
Restriction(s): Registration in BSC.BIOC (major or minor), BIOC:C , BTOX, BTOX:C, BPCH, BPCH:C, MICR(major or minor), MICR:C , MBG (major or minor), PBTC, PLSC (major or minor), TOX, TOX:C
Department(s): Department of Molecular and Cellular Biology

MBG*3660 Genomics W (3-0) [0.50]
This course examines the genomes of eukaryotes and prokaryotes including how genomes are mapped and sequenced, the function of the genome and ethical issues arising from genomic information. How genomic data is used for understanding and treating human disease and for the study of evolution will also be discussed.
Prerequisite(s): MCB*2050
Department(s): Department of Molecular and Cellular Biology

MBG*4020 Genetics of Companion Animals F (3-0) [0.50]
This course explores theoretical and applied aspects of breeding programs for performance, pleasure and hobby animal populations to enhance genetic selection and population viability. Case studies are used to explore the theory and practice of designing practical and sustainable breeding programs that integrate molecular genetics, animal breeding and statistical genomics for a variety of single and multiple birth species.
Prerequisite(s): MBG*3060
Equate(s): ANSC*4020
Department(s): Department of Animal Biosciences

MBG*4030 Animal Breeding Methods and Applications W (3-2) [0.50]
Theoretical and scientific aspects of practical animal breeding programs which lead to genetic improvement of efficiency and profitability of animal production will be presented along with applications to livestock and poultry species. This course integrates quantitative genetics with concepts of statistics, economics, biology and biotechnology and expands into development of practical breeding plans.
Prerequisite(s): MBG*3060
Department(s): Department of Animal Biosciences

MBG*4040 Genetics and Molecular Biology of Development F (3-2) [0.50]
This course provides an examination of the genetic mechanisms that underlie organismal development. The molecular biology of cell determination and differentiation and the genetic control of morphogenesis and pattern formation will be emphasized.
Prerequisite(s): MBG*3040
Department(s): Department of Molecular and Cellular Biology

MBG*4110 Epigenetics F (3-0) [0.50]
This course presents classical non-Mendelian phenomena, including analysis of chromosome breakage, transposition, imprinting and paramutation. Modern advances in gene regulation via epigenetic phenomena will be a central theme, focusing on chromatic remodeling, gene silencing and RNA interference as they pertain to organism development, with an emphasis on plants.
Prerequisite(s): MBG*3040
Department(s): Department of Molecular and Cellular Biology

MBG*4160 Plant Breeding F (3-2) [0.50]
This course examines the application of genetic principles to plant improvement. Topics include breeding objectives, mating systems, selection, testing and germplasm maintenance of horticultural and crop plants.
Prerequisite(s): (MBG*2040 or MBG*2400), STAT*2040
Department(s): Department of Plant Agriculture
MBG*4240 Applied Molecular Genetics in Medicine and Biotechnology W (3-0) [0.50]
This course will examine advanced techniques and methods used in molecular biology, medicine and biotechnology such as genome, transcriptome and proteome analysis, contemporary genetic screens, genetic engineering, transgenic organisms and gene therapy. The course will highlight the most recent developments and applications of such techniques.
Prerequisite(s): MBG*3040
Department(s): Department of Molecular and Cellular Biology

MBG*4270 DNA Replication, Recombination and Repair W (3-0) [0.50]
This course will examine the DNA transactions that determine the structure and function of the genome, with an emphasis on natural and synthetic mutagens and their mode of action, replication and recombination of genetic material, recognition and repair of DNA damage, and inherited and somatic genetic diseases arising from abnormal DNA metabolism.
Prerequisite(s): MCB*2050
Department(s): Department of Molecular and Cellular Biology

MBG*4300 Plant Molecular Genetics F (3-0) [0.50]
This course studies the molecular genetics of plants. The topics include: plant genome diversity and synteny; Arabidopsis thaliana genome, hormonal, environmental and developmental regulation of gene expression; chloroplast and mitochondrial genomes; and gene expression and silencing in transgenics. The course will be delivered using a lecture and paper discussion format. Students will learn and use a variety of computer techniques to search and analyze plant genome databases.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): MBG*2040 or MBG*2400
Department(s): Department of Plant Agriculture
Music

School of Fine Art and Music

Ensembles

Chamber Ensembles

Choir (Symphonic Choir, Chamber Choir, Siren-Women's Choir)

Concert Winds

Contemporary Music Ensemble

Early Music Ensemble

Jazz Band

Note: All ensembles are not necessarily offered every semester.

Solo Performance (Applied Music): Private instruction is offered in piano, voice, orchestral instruments, and various jazz and early instruments. In order to register in Applied Music (MUSC*1500), students must arrange an audition with the School of Fine Art and Music at the time of course selection. Applied Music is restricted to students registered in a Music program (general, area of concentration; honors, major or minor), in Semesters 1-4 (with the exception of Honours Majors in Music, who may audition to register in MUSC*1500 at any time in their studies).

Applied Music courses are designed to be taken in successive semesters. Registration in this sequence following an interruption of more than one semester requires permission of the Director of the School. Students may be required to re-apply before registering to continue in Applied Music. Students must achieve a minimum grade of 70% in Applied Music courses in order to proceed to the next level.

MUSC*1060 Amadeus to Zeppelin: Music and Culture F,W (3-0) [0.50]

This course explores the place classical music holds in contemporary society, drawing upon texts from popular and cyber culture. Focusing on examples that engage with Western art music from 1100 – 1791 C.E., this course teaches students the skills necessary for media and information literacy while also developing music-historical knowledge and providing foundational training in university-level writing about music. No prior musical training is necessary.

Restriction(s): MUSC*2280 , MUSC*2600 , MUSC*2610 , MUSC*2620

Department(s): School of Fine Art and Music

MUSC*1090 Physics of Music F (3-0) [0.50]

This course is designed for arts and social science students with an interest or background in music. The fundamentals of vibrations and waves will be introduced and applied to a study of archetypal instruments. The psychoacoustic basis of pitch and loudness will be discussed.

Offering(s): Offered in even-numbered years.

Equate(s): PHYS*1810

Restriction(s): Students who have standing in any 1000 level physics course, except PHYS*1300 or PHYS*1600, may enrol in this course only if they are completing an honours or general B.A. program in Music. In this case, permission of the instructor is required.

Department(s): School of Fine Art and Music

MUSC*1130 Introduction to Musicianship S,F,W (0-8) [0.50]

Fundamentals of ear training, sight-singing, keyboard, and written skills (rudiments such as scales, intervals and basic chord identification) are introduced. Proficiency on an instrument is not required, but previous experience with note-reading is expected. MUSC*1130 cannot be counted toward a specialization in music.

Offering(s): Offered through Distance Education format only.

Equate(s): MUSC*1120

Restriction(s): MUSC*1180

Department(s): School of Fine Art and Music

MUSC*1180 Musicianship I F,W (3-0) [0.50]

This course explores the inner workings of music--its harmonic, melodic, and rhythmic building blocks. Through intense exercises that hone skills in ear training, dictation, keyboard, improvisation, and harmonization, students gain a deep understanding of how music works, and acquire practical musical skills that contribute to future work in composition, music theory, (ethno)musicology, pedagogy, and performance. A solid base in rudiments is required for this course, and will be assessed upon registration.

Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods.

Department(s): School of Fine Art and Music

MUSC*1500 Applied Music I F,W (1-6) [0.50]

This course provides individual instruction in the technical and stylistic aspects of artistic performance, and prepares students for public performance. In order to register for this course, students must arrange an audition with the School of Fine Art and Music at the time of course selection.

Restriction(s): Successful completion of an audition. Registration in semesters 1 to 4 (with the exception of BA Honours Music Majors, who may apply at any time). Registration in a Music Specialization.

Department(s): School of Fine Art and Music

MUSC*1510 Applied Music II S,F,W (1-6) [0.50]

This course is a continuation of MUSC*1500.

Prerequisite(s): A minimum grade of 70% in MUSC*1500.

Restriction(s): Registration in a Music Specialization.

Department(s): School of Fine Art and Music

MUSC*2010 The Musical Avant-Garde F (3-0) [0.50]

This course offers an introduction to the avant-garde musical life of the 20th century and beyond including the works of Debussy, Stravinsky, Satie, Schoenberg, Cage, Cowell, and others.

Offering(s): Offered in odd-numbered years.

Prerequisite(s): 2.00 credits

Department(s): School of Fine Art and Music

MUSC*2030 Music in Canada F (3-0) [0.50]

The background and development of musical life in Canada. Cultivation of understanding of Canadian music using recorded examples with emphasis on 20th-century compositions.

Offering(s): Offered in even-numbered years.

Prerequisite(s): 2.00 credits

Department(s): School of Fine Art and Music

MUSC*2100 Creating Music on the Computer F,W (3-0) [0.50]

An introduction to computer technologies as they apply to the creation and manipulation of music. Topics will be drawn from the areas of sound synthesis and processing, recording, encoding, and transcription. The course will include a classroom and an applied component.

Prerequisite(s): MUSC*1180

Department(s): School of Fine Art and Music

MUSC*2140 History of Jazz F,W (3-0) [0.50]

A survey of the major styles, personalities, and performances of the jazz tradition in terms of its social and cultural contexts through the examination of jazz texts and commentary, autobiographies of musicians, and recorded examples of important performances.

Offering(s): Also offered through Distance Education format.

Department(s): School of Fine Art and Music

MUSC*2150 Music and Popular Culture F,W (3-0) [0.50]

A survey of the major genres, styles, personalities and performance of popular music primarily in the 20th-century through lectures, listening, discussion and reading. Issues such as the relationships between popular music and race, class, technology, and art will be examined. Technical knowledge of music is not required.

Offering(s): Also offered through Distance Education format.

Department(s): School of Fine Art and Music

MUSC*2180 Musicianship II F,W (3-0) [0.50]

A continuation of MUSC*1180.

Prerequisite(s): MUSC*1180

Department(s): School of Fine Art and Music

MUSC*2220 Electronic Music in the Digital Age W (3-0) [0.50]

This course will provide an introduction to digital music, from the initial "cybernetic" experiments of the 1950s to the evolution of software tools for synthesizing, processing, and analyzing sound to the development of music/audio-related hardware such as digital synthesizers, samplers, recorders, mixers, and workstations. An overview of musical genres utilizing digital technology will be presented (experimental, techno, dance, rap, ambient, etc.). Digital technology, including the revolutionary MIDI protocol, will be set into historical context, looking at musical and social developments and milestones, as well as related non-digital technology such as analog synthesizers and multi-track recorders.

Offering(s): Offered in odd-numbered years.

Prerequisite(s): 2.00 credits

Department(s): School of Fine Art and Music

MUSC*2270 World Music F (3-0) [0.50]

This course offers an ethnomusicological introduction to the musical life of Sub-Saharan Africa, India, South America, the Middle East, Indonesia, and the Far East.

Restriction(s): MUSC*2200 , MUSC*2110

Department(s): School of Fine Art and Music

XII. Course Descriptions, Music

Restriction(s): None

Department(s): School of Fine Art and Music

Offering(s): Offered through Distance Education format only.

Equate(s): MUSC*1130
MUSC*2330 Beethoven to Broadway: Music and Culture II W (3-0) [0.50]
This course explores the connections between contemporary culture and the history of Western Art Music. Focusing on material from 1750 to 1890, this course considers how cyber and popular culture engage with and often distort the historical origins of “classical” music. Students will further develop media and research literacy skills and will continue to hone their command of writers’ craft. The ability to read music is required for this course.

Prerequisite(s): MUSC*1060
Restriction(s): MUSC*2600, MUSC*2610, MUSC*2620
Department(s): School of Fine Art and Music

MUSC*2380 Classical Music from Concert Hall to Cinema S (3-0) [0.50]
This is a music appreciation course intended for non-music majors. This course explores the sonic codes of western art music (“Classical” music) as they developed in their original contexts, as well as their current use and meaning in today’s film soundtracks. The works chosen for study are those likely to be encountered in modern concert and opera halls and are selected primarily from the Baroque, Classical, and Romantic eras.

Offering(s): Offered through Distance Education format only.
Prerequisite(s): 2.00 credits
Restriction(s): MUSC*1060, Not available to students registered in a Music specialization.
Department(s): School of Fine Art and Music

MUSC*2410 Applied Composition I F (3-0) [0.50]
This course offers class instruction in the technical and aesthetic aspects of music composition.

Prerequisite(s): MUSC*2180
Restriction(s): Registration in a Music Program (Honours major or minor, General)
Department(s): School of Fine Art and Music

MUSC*2420 Applied Composition II W (3-0) [0.50]
This course is a continuation of MUSC*2410.

Prerequisite(s): A minimum grade of 70% in MUSC*2410.
Restriction(s): Registration in a Music Program (Honours major or minor, General)
Department(s): School of Fine Art and Music

MUSC*2500 Applied Music III S,F,W (1-6) [0.50]
A continuation of MUSC*1510.

Prerequisite(s): (MUSC*1180 or MUSC*2180), a minimum grade of 70% in MUSC*1510. (MUSC*1180 or MUSC*2180 may be taken as corequisite)
Restriction(s): Registration in a Music specialization.
Department(s): School of Fine Art and Music

MUSC*2510 Applied Music IV S,F,W (1-6) [0.50]
A continuation of MUSC*2500.

Prerequisite(s): A minimum grade of 70% in MUSC*2500
Restriction(s): Registration in a Music specialization.
Department(s): School of Fine Art and Music

MUSC*2530 Instrumental Ensembles I F,W (0-2) [0.25]
The study and performance of selected instrumental music through participation in one of the School’s ensembles: Chamber Ensemble, Concert Winds, Contemporary Music Ensemble, Jazz Ensemble. In order to register for an ensemble, the student must arrange for an audition with the School of Fine Art and Music. Auditions will be held prior to the first day of classes each Fall and Winter semester. Students must check with the School of Fine Art and Music office for audition dates. Students are encouraged to audition for an ensemble in the Fall semester and to participate in it for both Fall and Winter semesters. Not all ensembles will be able to accept new members in Winter. Consult the School of Fine Art and Music for further information.

Restriction(s): Instructor consent required. Successful completion of an audition.
Department(s): School of Fine Art and Music

MUSC*2540 Instrumental Ensembles II F,W (0-2) [0.25]
A continuation of MUSC*2530.

Prerequisite(s): MUSC*2530
Restriction(s): Instructor consent required.
Department(s): School of Fine Art and Music

MUSC*2550 Choral Ensembles I F,W (0-2) [0.25]
The study and performance of selected choral literature through participation in one of the School’s ensembles: the University of Guelph Symphonic Choir, the Gryphon Singers. In order to register for an ensemble, the student must arrange for an audition with the School of Fine Art and Music. Auditions will be held prior to the first day of classes each Fall and Winter semester. Students must check with the School of Fine Art and Music office for audition dates. Students are encouraged to audition for an ensemble in the Fall semester and to participate in it for both Fall and Winter semesters. Not all ensembles will be able to accept new members in Winter. Consult the School of Fine Art and Music for further information.

Equate(s): MUSC*2520
Restriction(s): Instructor consent required. Successful completion of an audition.
Department(s): School of Fine Art and Music

MUSC*2560 Choral Ensembles II F,W (0-2) [0.25]
A continuation of MUSC*2550.

Prerequisite(s): MUSC*2550
Equate(s): MUSC*2520
Restriction(s): Instructor consent required.
Department(s): School of Fine Art and Music

MUSC*2570 Keyboard Accompaniment I F,W (0-2) [0.25]
A continuation of MUSC*2570.

Prerequisite(s): MUSC*2570
Department(s): School of Fine Art and Music

MUSC*2660 Materials of Music I F (3-0) [0.50]
This course is a study of music theory and analysis. It builds on rudiments and musicianship skills developed in MUSC*1180 and introduces students to materials of music including melodic construction, phrase structure, linear counterpoint, rhythmic organization, and diatonic harmony. Students will work on both applied and analytical assignments.

Prerequisite(s): MUSC*1180
Co-requisite(s): MUSC*2180
Restriction(s): MUSC*1250, MUSC*2360
Department(s): School of Fine Art and Music

MUSC*3010 Materials of Music II W (3-0) [0.50]
This course continues the study of music theory and analysis. Students move on to learn about and work with more advanced concepts of tonal harmony and music analysis. The second half of the course introduces students to post-tonal music (20th-century). Students will work on both applied and analytical assignments.

Prerequisite(s): MUSC*2180, MUSC*2660
Restriction(s): MUSC*2360, MUSC*2370, MUSC*2670
Department(s): School of Fine Art and Music

MUSC*3150 Music in London F (3-0) [0.50]
A lecture/seminar course that will examine in depth choral and instrumental music of major composers from representative periods and media, performed at London, England. Compositions will be analyzed in relation to their stylistic technique, formal structure, and historical place in the repertoire of music. A professor of music will present weekly seminars, arrange assignments, and give personal supervision in London.

Restriction(s): Admission to the London Semester.
Department(s): School of Fine Art and Music

MUSC*3210 Instrumental Ensembles III F,W (0-2) [0.25]
This course is a continuation of MUSC*2540.

Prerequisite(s): MUSC*2540
Restriction(s): Instructor consent required.
Department(s): School of Fine Art and Music

MUSC*3220 Instrumental Ensembles IV F,W (0-2) [0.25]
This course is a continuation of MUSC*3210.

Prerequisite(s): MUSC*3210
Restriction(s): Instructor consent required.
Department(s): School of Fine Art and Music
MUSC*2560  Choral Ensembles III F,W (0-2) [0.25]
This course is a continuation of MUSC*2560.
Prerequisite(s):  MUSC*2560
Restriction(s):  Instructor consent required.
Department(s):  School of Fine Art and Music

MUSC*2560  Choral Ensembles IV F,W (0-2) [0.25]
This course is a continuation of MUSC*2560.
Prerequisite(s):  MUSC*2560
Restriction(s):  Instructor consent required.
Department(s):  School of Fine Art and Music

MUSC*3410  Collaborative Performance Project II F,W (0-3) [0.25]
This course is a continuation of MUSC*2560.
Prerequisite(s):  A minimum grade of 70% in MUSC*2560 and (2 of MUSC*2530, MUSC*2540, MUSC*2550, MUSC*2560).
Restriction(s):  Registration in a Music Program (Honours major or minor, General).
Department(s):  School of Fine Art and Music

MUSC*3420  Collaborative Performance Project IV F,W (1-6) [0.50]
This course is a continuation of MUSC*3410.
Prerequisite(s):  A minimum grade of 70% in MUSC*3410.
Restriction(s):  Registration in a Music Program (Honours major or minor, General).
Department(s):  School of Fine Art and Music

MUSC*3500  Collaborative Performance Project V S,F,W (1-6) [0.50]
A continuation of MUSC*2510.
Prerequisite(s):  3.00 credits in music courses including a minimum grade of 70% in MUSC*2510, (MUSC*2540 or MUSC*2560).
Restriction(s):  Registration in a Music Program (Honours major or minor, General, Area of Concentration).
Department(s):  School of Fine Art and Music

MUSC*3510  Collaborative Performance Project VI S,F,W (1-6) [0.50]
A continuation of MUSC*3500 including preparation and performance of a juried recital, restricted to students in a Music program (honours major or minor or general, area of concentration).
Prerequisite(s):  4.00 credits in music courses including a minimum grade of 70% in MUSC*3500
Restriction(s):  Registration in a Music Program (Honours major or minor, General, Area of Concentration).
Department(s):  School of Fine Art and Music

MUSC*3550  Collaborative Performance Project I F,W (0-3) [0.25]
The study and performance of selected instrumental or vocal chamber music through participation in a small ensemble under the guidance of a supervising instructor. Students will organize the ensemble, which normally consists of two to six vocalists and/or instrumentalists, design a project with the instructor, and submit a proposal to the Music Faculty Committee for approval by the last day of course selection in fall (or winter) or winter (for the following fall). A form is available from the School Office for this purpose.
Prerequisite(s):  MUSC*2500, (2 of MUSC*2530, MUSC*2540, MUSC*2550, MUSC*2560)
Restriction(s):  Registration in a Music Program (Honours major or minor, General, Area of Concentration). Instructor consent required.
Department(s):  School of Fine Art and Music

MUSC*3560  Collaborative Performance Project II F,W (0-3) [0.25]
A continuation of MUSC*3550.
Prerequisite(s):  MUSC*3550
Restriction(s):  Instructor consent required.
Department(s):  School of Fine Art and Music

MUSC*3630  Tragedy, Technology, and Torture: Music Post 1900 F (3-0) [0.50]
This course examines music from the late 19th century (Debussy and post-romantic composers) to the present from both historical and theoretical perspectives.
Prerequisite(s):  MUSC*2660, (MUSC*2330 or MUSC*2620)
Co-requisite(s):  MUSC*3010
Department(s):  School of Fine Art and Music

The following topics courses normally focus on current areas of faculty research. It is expected that students will have completed at least 7.50 credits before taking these upper-level courses.

MUSC*3730  Topics in Jazz and Improvised Music F (3-0) [1.00]
This course provides a seminar experience in focussed topics related to jazz and improvised music. Topics will normally include some combination of the following: jazz/improvisation history and theory, critical studies in jazz/improvised music. Subject matter will vary according to the instructor.
Offering(s):  Offered in even-numbered years.
Prerequisite(s):  7.50 credits including MUSC*2140
Department(s):  School of Fine Art and Music

MUSC*3740  Topics in Popular Music Studies F (3-0) [1.00]
This course examines the rise and impact of the cultural industries on production and consumption of music, the development of transnational popular music, and the role popular music plays in the politics of social identity.
Offering(s):  Offered in even-numbered years.
Prerequisite(s):  7.50 credits including (MUSC*1180 or MUSC*2180), MUSC*2150
Department(s):  School of Fine Art and Music

MUSC*3800  Topics in Music History/Analysis W (3-0) [1.00]
This course examines selected topics in music history, performance practice, and analysis, and music within its cultural context.
Offering(s):  Offered in even-numbered years.
Prerequisite(s):  7.50 credits including (MUSC*2670 or MUSC*3010), MUSC*3630
Department(s):  School of Fine Art and Music

MUSC*3820  Topics in Ethnomusicology F (3-0) [1.00]
Topics for this course will normally include some combination of the following: a specific world music tradition, ethnomusicological issues, theories, or methods. Subject matter will vary according to the instructor.
Offering(s):  Offered in odd-numbered years.
Prerequisite(s):  7.50 credits including (MUSC*1180 or MUSC*2180), MUSC*2270
Department(s):  School of Fine Art and Music

MUSC*3860  Topics in Digital Music F (3-0) [1.00]
This is a course which focuses on a specific area of digital music production. Topics may include advanced audio production, advanced MIDI sequencing, advanced music notation/instrumentation, synthesis and signal processing, music-oriented computer programming, or interactive computer music. Normally, a major creative project will be completed and presented as an outcome of the course.
Offering(s):  Offered in odd-numbered years.
Prerequisite(s):  7.50 credits including MUSC*2100, MUSC*2220
Restriction(s):  Instructor consent required.
Department(s):  School of Fine Art and Music

MUSC*3880  Topics in Music Pedagogy W (3-0) [1.00]
This course examines current philosophical trends in music education, and the application of various theories of music learning. Students will be asked to process conflicting ideas as presented through readings, class discussion, and their own experience as learners. There is also a practical component, in which each student will conduct an ensemble or give a series of private lessons, as well as present a collaborative teaching assignment.
The course is designed to prepare music students to teach privately or in a classroom.
Offering(s):  Offered in odd-numbered years.
Prerequisite(s):  7.50 credits including MUSC*2180, MUSC*2660
Department(s):  School of Fine Art and Music

MUSC*4200  Independent Project in Music S,F,W (3-0) [0.50]
This is an independent learning option in music for qualified students working in consultation with a faculty advisor. The project may take the form of a course of readings and assignments, enabling the student to investigate a topic in music not otherwise available in the curriculum. It may also include a creative component (such as composition) or an experiential learning component (such as a professional performance opportunity, or a community outreach opportunity). A written proposal, signed by the faculty advisor, must be submitted to the Director of the School for approval by the last day of course selection in the previous semester.
Prerequisite(s):  3.00 credits in Music, including (1 of MUSC*3730, MUSC*3740, MUSC*3800, MUSC*3820, MUSC*3860, MUSC*3880)
Restriction(s):  Registration in a Honours major or minor in music or an area of concentration (General Program) in Music. Instructor consent required.
Department(s):  School of Fine Art and Music
MUSC*4450 Honours Seminar in Music W (3-0) [1.00]
The Honours Seminar in Music teaches advanced research methods common to a range
of musical investigations: musicology (including ethnomusicology, popular music and
jazz), music theory, music pedagogy, and musical creation. In addition, the Honours
Seminar in Music allows students to engage in individual research with concentrated
energy through a one semester/one credit course in a supportive peer environment.
Students will develop a research project proposal for approval by the instructor in the
semester prior to enrolling in this course.
Prerequisite(s): Completion of the music core.
Restriction(s): Instructor consent required.
Department(s): School of Fine Art and Music

MUSC*4460 Honours Music Recital Preparation S,F,W (1-6) [0.50]
First part of a two-semester performance project culminating in a music recital at the end
of the second semester. Students will present a preparatory performance at the end of the
first semester. Qualified instrumentalists, vocalists, and composers who have completed
the applied music or applied composition course sequences are eligible to present a
full-length recital. In the case of composers it is the responsibility of the student to organize
performers to present the music. Recital proposals must be submitted to the Director of
the School, on the provided form, by the last day of course selection in the previous
semester. MUSC*4460 and MUSC*4470 are normally taken over consecutive semesters.
Prerequisite(s): Completion of the music core, a minimum grade of 70% in
MUSC*3510
Equate(s): MUSC*4401
Restriction(s): Permission of the School and registration in an honours major in music.
Department(s): School of Fine Art and Music

MUSC*4470 Honours Music Recital S,F,W (1-6) [0.50]
Second part of a two-semester performance project culminating in a music recital at the end
of the second semester. MUSC*4460 and MUSC*4470 are normally taken over
consecutive semesters.
Prerequisite(s): A minimum grade of 70% in MUSC*4460
Equate(s): MUSC*4402
Restriction(s): Registration in an honours major in music.
Department(s): School of Fine Art and Music
## Nanoscience

### NANO*1000 Introduction to Nanoscience F (3-0) [0.50]
This course introduces students to the emerging field of nanoscience. Its representation in popular culture and journalism will be contrasted with the present and near future realities in the field. Current industrial and business applications will be discussed. Guest lectures will be given by faculty performing research in the field. The course also aims to help students in their transition to the academic life by emphasizing skills and values such as academic integrity and problem solving and by actively connecting their first-year science core courses to the field of nanoscience.

**Prerequisite(s):** 4U Chemistry or 4U Physics

**Restriction(s):** Registration in Nanoscience Major.

**Department(s):** Department of Chemistry

### NANO*2000 Synthesis and Characterization of Nanomaterials I F (3-3) [0.50]
This course explores the structural, mechanical, and electronic properties of matter. Methods to fabricate nanosstructured materials such as nanoparticles, nanocomposites, thin films, polymers, and ferrofluids will be discussed. Techniques that have been developed to analyze these materials are also discussed, including scattering, microscopy and spectroscopy.

**Prerequisite(s):** CHEM*1050, [IPS*1510 or (MATH*1210, PHYS*1010)]

**Restriction(s):** Registration in Nanoscience Major.

**Department(s):** Department of Chemistry

### NANO*2100 Synthesis and Characterization of Nanomaterials II W (3-3) [0.50]
The structural, mechanical, and electronic properties of matter will be discussed. Topics will include methods to fabricate nanosstructured materials such as nanoparticles, nanocomposites, thin films, polymers, and ferrofluids, as well as techniques that have been developed to analyze these materials, including scattering, microscopy, and spectroscopy.

**Prerequisite(s):** NANO*2000

**Department(s):** Department of Physics

### NANO*3200 Nanolithographic Techniques F (3-3) [0.50]
Lithographic techniques applied at the micrometer and nanometer scale are key to the production of devices for the electronic and related industries. Projection and proximity techniques (XUV, electron, and ion beams) and writing processes (electron beam, ion beam, and scanned probe) will be explored. Emphasis will also be placed on soft lithographic techniques such as stamping and dip-pen nanolithography.

**Prerequisite(s):** NANO*2100

**Department(s):** Department of Chemistry

### NANO*3300 Spectroscopy of Nanomaterials W (3-3) [0.50]
The interaction of nanostructured matter with light gives rise to some of its most important observable properties. The absorption and fluorescence properties of nanomaterials will be studied. Particular attention will be paid to experiments which require nanoscale path lengths, such as IR spectroscopy of monomolecular thin films. Local spectroscopic probes with nanoscale resolution such as Near-field Scanning Optical Microscopy (NSOM) and Scanning Probe Spectroscopy (SPS) will be explored.

**Prerequisite(s):** NANO*2100, (CHEM*3860 or PHYS*3230)

**Department(s):** Department of Chemistry

### NANO*3500 Thin Film Science F (3-3) [0.50]
The deposition and growth of thin layers of materials is an important process on the production of many devices. This course will study the various methods by which thin films are grown including physical and chemical vapour deposition, molecular beam epitaxy, atomic layer epitaxy, and self-assembled monolayers. Experimental techniques for analyzing the properties of thin films will also be discussed.

**Prerequisite(s):** NANO*2100

**Department(s):** Department of Physics

### NANO*3600 Computational Methods in Materials Science W (3-3) [0.50]
Many computational techniques have been brought to bear on the study of nanostructured matter. This course will present several of these techniques and will introduce a number of computational packages that can be used to study matter. Monte Carlo and ab initio methods along with molecular dynamics simulations will be studied, with an emphasis upon the implementation of the software packages and the appropriate interpretation of the results.

**Prerequisite(s):** (MATH*1160 or MATH*2160), (MATH*2170 or MATH*2270), (CHEM*3860 or PHYS*3230)

**Department(s):** Department of Physics

### NANO*4100 Biological Nanomaterials F (3-0) [0.50]
Biological systems provide a rich range of examples of specialized chemical systems that are structured on the nanoscale. Nanofibres, microtubules, viruses, and ribosomes are examples of systems that can be studied from the perspective of nanoscience. Using these systems or developing artificial systems which mimic their functionality are important growth areas in nanoscience and will be explored in this course.

**Prerequisite(s):** MATH*2270, (CHEM*2820 or PHYS*2240)

**Department(s):** Department of Physics

### NANO*4200 Topics in Nanomaterials W (3-0) [0.50]
This course will introduce students to special topics in nanostructured materials. The course will illustrate how to design, create, characterize and utilize new materials in which the presence of a nanoscale structural elements results in new properties of fundamental and technological importance.

**Prerequisite(s):** NANO*3300, NANO*3500, (CHEM*3860 or PHYS*3230)

**Department(s):** Department of Chemistry

### NANO*4700 Concepts in Quantum Computing F (3-0) [0.50]
This course introduces concepts in quantum computation and quantum information. Following an introduction to the basics of linear algebra, quantum mechanics, and computer science, presented from the viewpoint of quantum information theory, topics covered will include quantum computation, quantum algorithms, quantum error correction, quantum cryptography and quantum communication.

**Prerequisite(s):** MATH*1160, (CHEM*3860 or PHYS*3230)

**Department(s):** Department of Chemistry

### NANO*4900 Advanced Studies in Nanoscience W (1-5) [0.50]
This course will guide students through the primary literature of the field with readings from recent achievements. Students will select individual topics on which they will prepare seminars and written reports.

**Prerequisite(s):** 1.50 credits in NANO courses at the 3000 level.

**Restriction(s):** PHYS*4300

**Department(s):** Department of Physics

### NANO*4910 Nanoscience Research Project I S,F,W (0-12) [1.00]
Students will work with faculty in their laboratories on research topics of current interest. A final written paper and oral presentation of the work will be given by the students.

**Prerequisite(s):** 1.50 credits in NANO courses at the 3000 level.

**Restriction(s):** Instructor consent required.

**Department(s):** Department of Chemistry

### NANO*4920 Nanoscience Research Project II S,F,W (0-12) [1.00]
Students will work with faculty in their laboratories on research topics of current interest. A final written paper and oral presentation of the work will be given by the students.

**Prerequisite(s):** NANO*4910

**Restriction(s):** Instructor consent required.

**Department(s):** Department of Chemistry
# Neuroscience

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Department(s)</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEUR*2000</td>
<td>Introduction to Neuroscience F (3-0) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This course offers an introduction to the mammalian nervous system, with emphasis on the structure and function of the human brain. General principles of the function and organization of nervous systems will be discussed, providing both an overview of the subject and a foundation for advanced courses. Topics will include the physical and chemical bases for action potentials, synaptic transmission, and sensory transduction; anatomy; development; sensory and motor pathways; and the neuroscience of brain diseases. Prerequisite(s): BIOL<em>1090, PSYC</em>1000. Restriction(s): PSYC*2410. This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Department(s): Department of Psychology</td>
</tr>
<tr>
<td>NEUR*3100</td>
<td>Molecular Biology of Neurodevelopmental and Degenerative Disease F (3-0) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This course will follow the life of nervous system cells from birth, through their functional life, and ending in ageing and degenerative disease. Focus will be on the molecular and cellular events that govern these processes and the diseases and pathologies, such as Parkinson's and Alzheimer's, that arise as a consequence of their dysfunction. Finally, students will be introduced to the new and rapidly advancing field of adult neural stem cells and the promises and potential problems of their use in treating many of the diseases that will have been discussed throughout. Prerequisite(s): MCB<em>2050, (NEUR</em>2000 or PSYC*2410). Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs (BSCH.NEUR, NEUR minor) or semester levels during certain periods. Department(s): Department of Molecular and Cellular Biology</td>
</tr>
<tr>
<td>NEUR*3500</td>
<td>Techniques in Neuroscience W (2-3) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This course provides an introduction to selected techniques used in Neuroscience. Students will investigate and learn key methods in neurophysiology and biomechanics, neuroanatomy, cognitive neuroscience, and molecular and cellular neurobiology, used to address contemporary problems in this multidisciplinary field. These techniques will be introduced through literature review, hands-on laboratory exercises and demonstrations. A diversity of vertebrate and invertebrate model organisms will be considered as well as the ethical considerations that accompany the use of animals or human subjects in research. Prerequisite(s): (NEUR<em>2000 or PSYC</em>2410 ), PSYC*3270. Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs (BSCH.NEUR) or semester levels during certain periods. Department(s): Department of Molecular and Cellular Biology, Department of Biomedical Sciences, Department of Psychology, Department of Human Health and Nutritional Sciences</td>
</tr>
<tr>
<td>NEUR*4000</td>
<td>Current Issues in Neuroscience F (3-0) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This course will consist of guest lectures offered by faculty who are working in the field and will complement the seminars given by the students on topics that they have prepared in studying the primary literature. Students will also prepare a major paper on a neuroscience topic. Prerequisite(s): 14.00 credits. Restriction(s): Enrolment restricted to BSC.NEUR major and minor. Department(s): Department of Biomedical Sciences</td>
</tr>
<tr>
<td>NEUR*4100</td>
<td>Neuropharmacology F (4-0) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This course will explore pharmacological manipulation of the nervous system. Content will focus on the physiology of major neurotransmitter systems in the brain, followed by current pharmacological interventions for selected brain disorders, and the use and abuse of common pharmacological agents. Prerequisite(s): BIOM<em>3090, (NEUR</em>2000 or PSYC*2410). Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods: (e.g. BSC.NEUR major, minor, and BSC.BIOM). Department(s): Department of Biomedical Sciences</td>
</tr>
<tr>
<td>NEUR*4401</td>
<td>Research in Neurosciences S,F,W,W-S (0-6) [1.00]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This is the first part of the two-semester course NEUR<em>4401/2. Refer to NEUR</em>4401/2 for the course description. Prerequisite(s): 14.00 credits. Restriction(s): BIOM<em>4510, BIOM</em>4521/2, NEUR*4450. Instructor consent required. Enrolment restricted to BSC.NEUR major and minor. Department(s): Department of Biomedical Sciences</td>
</tr>
<tr>
<td>NEUR*4402</td>
<td>Research in Neurosciences S,F,W (0-6) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This is the second part of the two-semester course NEUR<em>4401/2. Refer to NEUR</em>4401/2 for the course description. Prerequisite(s): NEUR<em>4401. Restriction(s): BIOM</em>4510, BIOM<em>4521/2, NEUR</em>4450. Enrolment restricted to BSC.NEUR major and minor. Department(s): Department of Biomedical Sciences</td>
</tr>
<tr>
<td>NEUR*4450</td>
<td>Research in Neurosciences S,F,W (0-12) [1.00]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This course will follow the life of nervous system cells from birth, through their functional life, and ending in ageing and degenerative disease. Focus will be on the molecular and cellular events that govern these processes and the diseases and pathologies, such as Parkinson's and Alzheimer's, that arise as a consequence of their dysfunction. Finally, students will be introduced to the new and rapidly advancing field of adult neural stem cells and the promises and potential problems of their use in treating many of the diseases that will have been discussed throughout. Prerequisite(s): BIOM<em>4510, BIOM</em>4521/2, NEUR*4401/2. Instructor consent required. Enrolment restricted to BSC.NEUR major and minor. Department(s): Department of Biomedical Sciences</td>
</tr>
</tbody>
</table>
Nutrition

Department of Animal Biosciences
Department of Family Relations and Applied Nutrition
Department of Human Health and Nutritional Sciences

**NUTR*1010 Introduction to Nutrition F,W (3-0) [0.50]**
This course is an introduction to human nutrition, with major emphasis on nutrients and their dietary sources, functions, and relationships to health. Topics will include the energy-containing nutrients, selected vitamins and minerals and weight management. We will also explore current popular topics and emerging diet-disease relationships.

**Offering(s):** Also offered through Distance Education format.

**Restriction(s):** This is a Priority Access Course. For B.A.Sc. and FCS minor and some restrictions may apply during some time periods.

**Department(s):** Department of Family Relations and Applied Nutrition

**NUTR*1020 Professional Practice in Applied Nutrition W (3-0) [0.50]**

Through lectures, readings, group activities, and case studies students will explore the key knowledge and skills needed for a successful professional career in applied nutrition in Canada. Critical thinking, regulatory and ethical issues as applied in business, health care, public health and social services context are emphasized.

**Restriction(s):** Restricted to students in BASc.AHN major.

**Department(s):** Department of Family Relations and Applied Nutrition

**NUTR*2050 Nutrition Through the Life Cycle F (3-0) [0.50]**
This course explores how individual, family, community and societal factors influence nutritional needs and dietary intake from infancy through older adulthood. Implications for nutrition care and community-level programs are discussed.

**Offering(s):** Also offered through Distance Education format.

**Restriction(s):** This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the departmental website for more information.

**Department(s):** Department of Family Relations and Applied Nutrition

**NUTR*2150 Introduction to Nutritional and Food Sciences F (3-0) [0.50]**
This interdisciplinary course provides an introduction to the Food and Nutritional Sciences from both historical and modern perspectives. Major themes are the nutritional and functional properties of food, nutrient assimilation, food preservation and safety, and the interactions between food processing, diets and health. (Also listed as FOOD*2150.)

**Prerequisite(s):** NUTR*1010

**Equate(s):** BIOL*1040 or BIOL*1080, CHEM*1040

**Restriction(s):** FOOD*2100, FOOD*3090. Not available to students registered in B.A.Sc. AHN major.

**Department(s):** Department of Food Science

**NUTR*3070 Nutrition and Physical Activity Interventions W (3-0) [0.50]**
This course examines the development, implementation, and evaluation of: a) integrated interventions to improve both nutrition and physical activity behaviours; and, b) interventions to improve physical activity behaviours of people of different ages in various settings. Various theories and models used to develop nutrition and physical activity interventions will be examined.

**Prerequisite(s):** FRHD*3070, NUTR*2050

**Restriction(s):** Registration in the B.A.Sc. program.

**Department(s):** Department of Family Relations and Applied Nutrition

**NUTR*3090 Clinical Nutrition I W (3-3) [1.00]**
The epidemiology, pathophysiology, and role of nutrition will be considered in the prevention and management of several major chronic conditions including cardiovascular diseases, disorders of energy balance and diabetes mellitus. There is an emphasis on developing the skills for high risk individual management approaches.

**Prerequisite(s):** (BIOM*2000 or BIOM*3200), FRHD*3070, NUTR*2050, (NUTR*3190 or NUTR*3210), STAT*2090

**Co-requisite(s):** FRHD*3400

**Restriction(s):** NUTR*3040. Registration is limited to students registered in B.A.Sc. AHN major.

**Department(s):** Department of Family Relations and Applied Nutrition

**NUTR*3110 Food Security W (3-0) [0.50]**
The prevalence of food insecurity in Canada and selected industrialized and non-industrialized countries is examined. The course will review environmental, social, and other factors associated with food insecurity and take critical look at the effectiveness of programs and policies designed to improve food security.

**Prerequisite(s):** 9.50 credits including NUTR*2050

**Restriction(s):** Registration is limited to students registered in the B.A.Sc. AHN major.

**Department(s):** Department of Family Relations and Applied Nutrition

**NUTR*3150 Aging and Nutrition W (3-0) [0.50]**
This course provides an in-depth study of the determinants of food intake and nutrient recommendations for aging adults. Specific consideration will be given to eating environments and physiological changes that influence access, preparation, and consumption of food by older adults living in the community and in facilities. An emphasis will be placed on chronic disease prevention and management.

**Prerequisite(s):** 1 of NUTR*1010, NUTR*2150, NUTR*3210

**Restriction(s):** NUTR*2070

**Department(s):** Department of Family Relations and Applied Nutrition

**NUTR*3210 Fundamentals of Nutrition S,F,W (3-0) [0.50]**
This is the foundation course for the study of nutrition. The occurrence, uptake and metabolic role of nutrients will be discussed in relation to growth, reproduction and longevity in human subjects, domestic animals and other species.

**Offering(s):** Also offered through Distance Education format.

**Prerequisite(s):** BIOC*2580

**Department(s):** Department of Human Health and Nutritional Sciences

**NUTR*3330 Micronutrients, Phytochemicals and Health F (3-0) [0.50]**
The course emphasizes the biochemical basis for the dietary essentiality of vitamins and minerals. The course extends the fundamentals of nutrition to include conditional essentiality of micronutrients, biochemical individuality and the use of micronutrient supplementation to promote human and animal health. Both plant and animal sources of nutrients are discussed.

**Prerequisite(s):** NUTR*3210

**Department(s):** Department of Human Health and Nutritional Sciences

**NUTR*3360 Lifestyle Genomics F (3-0) [0.50]**
This course explores how genes and lifestyle choices (in particular diet and exercise) interact to affect cell and tissue function, and impact human health. These concepts will be examined through in-depth discussions of common metabolic diseases. The course is designed to highlight the integrative and inter-connected cellular, molecular, and physiological mechanisms underlying these conditions.

**Prerequisite(s):** BIOC*2580, BIOL*1080, MCG*2040

**Restriction(s):** Registration in BSCH.HK and BSCH.NANS (major or minor).

**Department(s):** Department of Human Health and Nutritional Sciences

**NUTR*3390 Applied Nutritional and Nutraceutical Sciences I F (3-3) [0.75]**
This course will introduce and develop key concepts of the applied aspects of the Nutritional and Nutraceutical Sciences. Enrichment of foods with health protectant chemicals, establishing biomarkers and risk indicators of disease, testing of bioavailability/efficacy to support basic health claims, health assessment and nutrigenomic analysis as adjuvants in the effective use of functional foods and nutraceuticals, and regulatory and marketing/consumer issues are topics that will be addressed.

**Prerequisite(s):** NUTR*3210

**Restriction(s):** Registration in the B.Sc. NANS major or minor and the B.Sc. FFAN minor.

**Department(s):** Department of Human Health and Nutritional Sciences

**NUTR*4010 Nutritional Assessment F (3-0) [0.50]**
This course examines the principles and methods used in nutritional assessment of individuals and populations in health and disease states. Dietary, anthropometric and biochemical techniques will be primary components. Nutritional screening, advanced techniques for body composition assessment, physical exam and clinical indicators will also be addressed. Significant independent learning will be required.

**Prerequisite(s):** 14.50 credits including NUTR*2050, NUTR*3210

**Restriction(s):** Registration in the B.A.Sc. AHN major.

**Department(s):** Department of Family Relations and Applied Nutrition

**NUTR*4040 Clinical Nutrition II F (3-0) [0.50]**
This course is a continuation of NUTR*3090. This lecture based course is concerned with the application of nutrition to clinical conditions. Methods and content of medical nutrition therapy in prevention and treatment of gastrointestinal, renal, hepatic diseases and catabolic states will be emphasized. Ethical issues in nutrition management of disease and health professional practice will be addressed.

**Prerequisite(s):** 14.50 credits including, [1 of BIOM*2000, BIOM*3100 or BIOM*3110, BIOM*3200, (NUTR*3040 or NUTR*3090)]

**Restriction(s):** Registration in the B.A.Sc. AHN major.

**Department(s):** Department of Family Relations and Applied Nutrition
NUTR*4070 Nutrition Education F (3-0) [0.50]
This course covers methods and approaches in nutrition education with particular emphasis on community programs in nutrition for different age groups; dietary counselling; nutrition education in the preschool, in prenatal and other specialized programs.
Prerequisite(s): FRHD*3400, NUTR*2050
Restriction(s): This is a Priority Access Course. Registration may be restricted to students registered in B.A.Sc. majors and the Family and Child Studies minor during certain time periods.
Department(s): Department of Family Relations and Applied Nutrition

NUTR*4090 Functional Foods and Nutraceuticals W (3-0) [0.50]
The course examines the relation of functional foods and nutraceuticals (FFN) to foods and drugs. The safety and efficacy of individual FFN products, and the regulatory issues that influence the development and commercialization of FFN in global markets are emphasized. (Also listed as FOOD*4090.)
Prerequisite(s): NUTR*3210
Equate(s): FOOD*4090
Department(s): Department of Human Health and Nutritional Sciences, Department of Food Science

NUTR*4120 Applied Clinical Skills W (0-3) [0.50]
This is a laboratory-based course which will enable students to gain skills in independently completing nutrition assessments and care plans of individuals and groups as they would be expected to do in nutrition professions. Students will comprehensively assess nutritional status, apply knowledge of human physiology, pathophysiology, medical terminology and nutritional assessment to diagnose nutritional problems/issues and formulate, implement and evaluate a nutrition intervention.
Prerequisite(s): NUTR*4010, NUTR*4040
Restriction(s): NUTR*4850. Restricted to students in B.A.Sc. AHN with at least 75% grade average in all completed NUTR and FRHD courses.
Department(s): Department of Family Relations and Applied Nutrition

NUTR*4210 Nutrition, Exercise and Energy Metabolism F (3-0) [0.50]
In this course energy metabolism will be considered under the headings: thermodynamic principles, energy deposition and hormonal control of metabolism; nutrition, exercise and environmental influences on energy balance and enzyme adaptation; nutrition and exercise in the control of body composition.
Prerequisite(s): NUTR*3210, (1 of BIOM*3200, HK*3810
Department(s): Department of Human Health and Nutritional Sciences

NUTR*4320 Nutrition and Metabolic Control of Disease W (3-0) [0.50]
This course provides a discussion of disorders of metabolism, either inherited or acquired, in which nutrition plays a major role in the etiology, pathogenesis, or treatment. The nutritional control of the affected metabolic pathways and the interaction of nutrition with exercise, drugs and gene therapy will be presented.
Prerequisite(s): NUTR*3210, (1 of BIOM*3200, HK*3810, ZOO*3210, ZOO*3620)
Department(s): Department of Human Health and Nutritional Sciences

NUTR*4330 Applied Nutritional and Nutraceutical Sciences II W (3-3) [0.75]
In this course laboratory and other investigational techniques are covered, together with their underlying concepts. The course is designed to enhance understanding of the design and use of nutraceuticals for human and animal health.
Prerequisite(s): NUTR*3330, NUTR*390, HK*3810
Restriction(s): Registration in B.Sc. NANS major or minor.
Department(s): Department of Human Health and Nutritional Sciences

NUTR*4360 Current Issues in Nutrigenomics W (3-0) [0.50]
This course discusses controversial and/or emerging topics in Human Health and Nutritional and Nutraceutical Sciences as it relates to nutrigenomics.
Prerequisite(s): NUTR*3210, (BIOM*3200 or HK*3810)
Department(s): Department of Human Health and Nutritional Sciences

NUTR*4510 Toxicology, Nutrition and Food F (3-0) [0.50]
This course examines the role of foods, herbsals and nutraceuticals as sources of antinutrients, natural toxins and environmental contaminants. The impact of toxic exposures on nutritional status, the impact of nutritional status on safe metabolism of toxins, and the use of this knowledge in the design of functional foods are also examined. Assessing the risk of genetically modified foods and radioactive contamination of a food supply.
Prerequisite(s): NUTR*3210
Department(s): Department of Human Health and Nutritional Sciences

NUTR*4810 Applied Human Nutrition Thesis I U (3-0) [0.50]
Planning, developing and writing a research proposal under individual faculty supervision. Topic to be decided by the student in consultation with the supervisory faculty member before course selection or registration period.
Prerequisite(s): FRHD*3070, NUTR*2050, (NUTR*3040 or NUTR*3090)
Restriction(s): Instructor consent required.
Department(s): Department of Family Relations and Applied Nutrition

NUTR*4850 Field Experience in Nutrition Education W (2-4) [0.50]
This course offers a supervised experience in nutrition education and a seminar. Students will apply principles of program planning, nutrition education theory and professional behaviour in a community setting. Placements may be arranged in institutional or community health settings, educational facilities, social services, or food industry. Seminar topics include professional ethics, exploring values, and issues management.
Prerequisite(s): FRHD*3400, NUTR*4040, NUTR*4070
Restriction(s): NUTR*4120 Instructor consent required.
Department(s): Department of Family Relations and Applied Nutrition

NUTR*4900 Selected Topics in Human Nutrition W (3-0) [0.50]
This course requires reading and discussion on selected areas in human nutrition and its application; formal class reports and term papers. Primarily for Applied Human Nutrition majors.
Prerequisite(s): FRHD*3070, (NUTR*3040 or NUTR*3090), NUTR*410
Restriction(s): Registration in B.A.Sc. AHN major.
Department(s): Department of Family Relations and Applied Nutrition

NUTR*4910 Applied Human Nutrition Thesis II U (6-0) [1.00]
The student will conduct and write an undergraduate thesis under the direction of a faculty member.
Prerequisite(s): NUTR*4810
Department(s): Department of Family Relations and Applied Nutrition
### OAGR*2070 Introduction to Organic Agriculture W (3-3) [1.00]

Students will be exposed to the scale of the organic industry today, including the factors driving interest in organics for both producers and consumers. The foundational principles underlying contemporary organic agriculture will be presented and first hand experience of current organic practices will be provided. In addition, this course will rely on small group mentoring to stimulate independent, learner-centered analysis of selected topics in organic agriculture.

**Prerequisite(s):** 5.00 credits

**Restriction(s):** OAGR*2050, OAGR*3030

**Department(s):** Department of Plant Agriculture, School of Environmental Sciences

### OAGR*4050 Design of Organic Production Systems F (6-0) [1.00]

Students will apply organic agriculture principles to the design and concept of agricultural operations, taking into account the interactions of soils, plants and animals with environmental and managerial factors.

**Prerequisite(s):** OAGR*2070

**Restriction(s):** OAGR*3130, OAGR*4160

**Department(s):** Department of Plant Agriculture, School of Environmental Sciences

### OAGR*4180 Social Issues in Organic Agriculture W (2-2) [0.50]

This interdisciplinary course will examine the major social issues in organic agriculture from both a global and local perspective, with an emphasis on synthesis and integration. Issues will include globalization, sustainability, gender, food, social movements, the organic agri-food system, rural communities, and the role of the family farm.

**Prerequisite(s):** 1 of EDRD*3400, OAGR*2070, SOC*2080

**Department(s):** School of Environmental Design and Rural Development
### Pathology

**Department of Pathobiology**

Additional course listings may be found in the course descriptions for Veterinary Medicine.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATH*3040</td>
<td>Principles of Parasitology</td>
<td>W (3-3)</td>
<td>10.00 credits including at least 1.50 credits in biology.</td>
<td>Department of Pathobiology</td>
</tr>
<tr>
<td></td>
<td>Parasitism is the most common biological association on the planet; virtually all organisms are parasitized by numerous parasites and many, such as the protists that cause malaria, are responsible for serious medical and/or veterinary diseases. This course will provide an in depth introduction to parasites and parasitism by exploring common protists, helminths and arthropods that infect animals and humans globally. The nature of parasitism will be explored by examining the development and transmission of many common parasitic agents, including their pathogenesis, zoonotic potential, diagnosis and treatment options.</td>
<td>PATH*3040 Principles of Parasitology W (3-3) [0.50]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATH*3610</td>
<td>Principles of Disease S,F,W</td>
<td>(3-0)</td>
<td>1.50 credits in biology</td>
<td>Department of Pathobiology</td>
</tr>
<tr>
<td></td>
<td>A course designed for students with particular interests in nutrition and biology. The course presents basic concepts of disease in the cells, tissues, organs and fluids of the body. Emphasis will be on disease processes resulting from physical, toxic and microbiological and other causes.</td>
<td>PATH*3610 Principles of Disease S,F,W (3-0) [0.50]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATH*4100</td>
<td>Diseases of Aquatic Animals</td>
<td>F (2-2)</td>
<td>PATH*3610</td>
<td>Department of Pathobiology</td>
</tr>
<tr>
<td></td>
<td>A course designed to familiarize the fisheries manager, researcher or veterinarian with the basic principles of diagnosis, prevention, and control of disease of free living and captive aquatic animals, with emphasis on fish.</td>
<td>PATH*4100 Diseases of Aquatic Animals F (2-2) [0.50]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Pharmacology

Department of Biomedical Sciences.

For course listings and descriptions see Biomedical Sciences.

Additional course listings may be found in the course descriptions for Veterinary Medicine and Toxicology.
XII. Course Descriptions, Philosophy

Philosophy

Department of Philosophy

Note: Specific descriptions of all courses to be offered in a given semester will be available from the Department of Philosophy in each preceding semester. Students are advised to consult these descriptions. Different sections of a course often emphasize different aspects of that course.

1. All 2000 level philosophy courses are open to students who have completed 2.00 credits or who have completed one of PHIL*1000, PHIL*1010, PHIL*1050.
2. Unless otherwise noted, 3000 level philosophy courses are open to students who have completed at least 1.50 credits in philosophy or 7.50 credits.
3. For most 4000 level courses, students are expected to have completed at least 1.00 credits in philosophy at the 3000 level. Some 4000 level credits have specific prerequisites, e.g. PHIL*4230, PHIL*4360 (see course descriptions in the following pages). If a student is taking several credits with such prerequisites, then the number of other philosophy credits which need to be completed may exceed the general requirement of 1.00 credits at the 3000 level. PHIL*4310 is designed to be open to seventh and eighth semester students who have no previous philosophy credit. If in doubt about being well prepared for a particular course, the student should consult with either the instructor or the chair of the department.
4. Students may receive credit for PHIL*1000, PHIL*1010 and PHIL*1050, but only one may be counted towards the minimum number of philosophy credits required for a degree in philosophy. Students intending to proceed in the discipline at the 2000 level are advised to take only 0.50 credits at the 1000 level.

PHIL*1000 Classic Thinkers F (3-0) [0.50]
This course will deal with enduring philosophical questions through an exploration of primary texts in the history of philosophy. Topics covered may include the nature of knowledge and the different types of knowledge, the relationship between the mind and the body, and the nature of good and evil. Texts and topics will vary with the instructor; students are advised to consult the Philosophy department's website.
Department(s): Department of Philosophy

PHIL*1010 Introductory Philosophy: Social and Political Issues F,W (3-0) [0.50]
This course introduces philosophy through an examination of important issues in politics and society, such as punishment, animal rights, discrimination, war and violence, equality and property. Issues may be introduced through contemporary or historical philosophical writings.
Department(s): Department of Philosophy

PHIL*1030 Sex, Love, and Friendship F,W (3-0) [0.50]
This course introduces students to philosophical inquiry through the careful study of the forms of interpersonal relationships. Issues central to friendship, love, and sexuality which may be addressed include pleasure, happiness, responsibility, power and oppression, gender, marriage and morality.
Department(s): Department of Philosophy

PHIL*1050 Ethics, Knowledge, and Reality W (3-0) [0.50]
This course introduces students to philosophy through the exploration of basic perennial philosophical problems and questions, such as whether there is free will, a God, objective right and wrong, genuine knowledge of the world, and other topics. The readings for the course will consist primarily of 20th century philosophical writing.
Department(s): Department of Philosophy

PHIL*2000 Philosophy of Biology W (3-0) [0.50]
This course focuses on philosophical issues that arise within biology, such as the explanation of altruism, the question of whether species are real, and the challenge of how to identify adaptations. The course also examines philosophical issues that arise at the interface between biology and society, such as the implications of evolutionary theory for traditional views about human nature, or the proper role for scientists in advocating for environmental policies.
Prerequisite(s): 2.00 credits including 0.50 credits in BIOL
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Philosophy

PHIL*2030 Philosophy of Medicine F (3-0) [0.50]
Medicine is a philosophical, not merely a practical, enterprise. This course covers philosophical concepts which are widely used to evaluate health and health-practices that include: autonomy, consent, mind, will, rights, harm, fairness, dignity, truth and even 'health' itself. Issues central to health and health care practice include: the nature of professional-client relationships, genetic counseling, passive and active euthanasia, pharmacology and behaviour modification, resource allocation, and the special set of issues raised by reproductive technologies.
Prerequisite(s): 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1050)
Department(s): Department of Philosophy

PHIL*2060 Philosophy of Feminism I W (3-0) [0.50]
This course examines metaphysical, epistemological and ethical issues in feminist philosophy, including such topics as the nature and consequences of patriarchy, human nature, sexual divisions of labour, women's studies, rationalizations of inequalities and explorations into a contemporary feminist agenda for social, political and economic changes.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1050)
Department(s): Department of Philosophy

PHIL*2070 Philosophy of the Environment W (3-0) [0.50]
Environmental Philosophy asks questions such as: How has ‘nature’ been conceptualized in the Western philosophical tradition, in aesthetics, science, and ethics? What arguments have been offered for the view that humans are superior among creatures? What connections might there be between the ways that nature, humankind, and animals have been conceptualized and the ways that humans have tended to act toward the non-human natural environment? This course may cover such topics as: climate change, resource extraction and justice, biotechnology, obligations to future generations, risk assessment and discount rates, species lost, conservation vs. preservation.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1050)
Department(s): Department of Philosophy

PHIL*2080 Animals in Philosophy S (3-0) [0.50]
This course will examine the concept of the animal itself, the nature of animal minds, the importance of species membership, and the relationship between human and non-human animals. It will discuss applied issues related to animal welfare, wildlife, agriculture, experimentation, and the environment. It will also explore some of the ethical, social, political and feminist perspectives on animals as they are addressed by philosophers. As such, the course aims to enable students to analyze growing concerns that animals play in our lives.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1050)
Department(s): Department of Philosophy

PHIL*2100 Critical Thinking F,W (3-0) [0.50]
This course is designed to develop clarity of thought and method in the analysis and construction of arguments. By contrast to PHIL*2110, the emphasis here is upon informal principles of critical thinking and arguments stated in terms of ordinary language. Topics include the nature and methods of arguing, classification, definition and fallacies.
Prerequisite(s): 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1050)
Department(s): Department of Philosophy

PHIL*2110 Formal Logic W (3-0) [0.50]
This course studies the basic principles and techniques of formal logic. The analysis of the logical structure of sentences and arguments is explored, together with the fundamental principles of elementary sentential logic and quantification.
Prerequisite(s): 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1050)
Department(s): Department of Philosophy

PHIL*2120 Ethics F,W (3-0) [0.50]
Philosophical ethics is the attempt to systematize, explain, and justify the standards by which we evaluate our conduct as persons. The course may include treatment of controversial ethical issues such as abortion, euthanasia, war, and the treatment of animals and will cover many of the following questions: can we expect to find a single, universal code of ethics that applies to all human beings, or do such codes vary for each society or even for each individual? What are the roles of reason and emotion in ethics? Is morality grounded on a principle, and if so, what is it? Are there any traits of character that one must have to be a good person? Given that traditional ethical codes have been almost universally sexist, how must ethics be refashioned in order for women to achieve equal recognition?
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1050)
Department(s): Department of Philosophy

PHIL*2140 Ancient Greek Philosophy F (3-0) [0.50]
A survey of the beginnings of Western philosophy, this course will focus on themes such as the nature of reality, the ways we might come to have knowledge, and the good life for human beings. This course will typically consider such thinkers as Socrates, Plato, Aristotle, and Epicurus, although the specific course content will vary with the instructor.
Prerequisite(s): 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1030, PHIL*1050)
Department(s): Department of Philosophy
### PHIL*2160 Early Modern Philosophy: Reason vs. Experience W (3-0) [0.50]

Philosophers of the seventeenth and eighteenth centuries grappled with a central question regarding the foundation of human knowledge: Does knowledge arise from pure reasoning alone or from sensory experience? This question inspired debates regarding scepticism, the nature of reality, the connection between mind and body, language and meaning, moral certainty, and the relationship between religion and science, to name but a few.

**Prerequisite(s):** 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1030, PHIL*1050)

**Department(s):** Department of Philosophy

### PHIL*2170 Existentialism F (3-0) [0.50]

Existentialism is a philosophy built around the experience of human freedom. This course focuses on the character of the subject who makes choices, and on the personal and political responsibilities that attach to the making of decisions. The course will examine this and other themes associated with Existentialism through nineteenth and twentieth century representative works, which include Kierkegaard, Sartre, de Beauvoir, Camus, and others.

**Offering(s):** Offered in odd-numbered years.

**Prerequisite(s):** 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1050)

**Department(s):** Department of Philosophy

### PHIL*2180 Philosophy of Science F (3-0) [0.50]

As a system of knowledge pursuit, science develops laws and theories to explain, predict, understand, and control empirical phenomena. This course introduces students to many of the challenging assumptions, foundations, and implications of science. Topics include the nature of scientific knowledge, the structure of scientific theories, the distinction between science and pseudo-science, whether there is a scientific method, and how social and political processes influence the way science develops.

**Prerequisite(s):** 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1050)

**Department(s):** Department of Philosophy

### PHIL*2240 Knowledge and Belief F (3-0) [0.50]

This course is an introduction to epistemology, which is the study of the nature, scope, and limits of knowledge. This course will examine a number of the central questions in epistemology, such as: what can we know? What is the nature of knowledge? And what is the difference between knowledge and true belief?

**Prerequisite(s):** 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1030, PHIL*1050)

**Equivalents:** PHIL*2250

**Department(s):** Department of Philosophy

### PHIL*2280 Key Concepts in Political Philosophy F (3-0) [0.50]

This course presents an in-depth treatment of one or more key concepts in political philosophy. Among the many possible concepts that the course may address are those of freedom, equality, power, community, identity, autonomy, justice, rights, political obligation, representation, authority, legitimacy, exploitation, emancipation, and development. These concepts may be explored historically or through contemporary political and/or philosophical debates.

**Prerequisite(s):** 0.50 credits in either Philosophy or Political Science

**Restriction(s):** POLS*2000

**Department(s):** Department of Philosophy

### PHIL*2370 Metaphysics and Mind W (3-0) [0.50]

This course studies major theories of the nature of reality, and of issues and problems that arise in the investigation of fundamental features of the world. Texts read may be either historical or contemporary. Among possible topics explored in the course are materialism, free will, and determinism, the nature of time, and the position of consciousness in the world.

**Prerequisite(s):** 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1030, PHIL*1050)

**Department(s):** Department of Philosophy

### PHIL*2600 Business and Professional Ethics W (3-0) [0.50]

This course examines ethical and evaluative issues relating to business and professional practices, and is intended for students registered in a science or professional program, but without a background in philosophy. Topics to be explored include the nature of values and ethical systems, duties and rights, private and public goods, the consumer movement, social marketing, corporate social accounting, private right and professional responsibility.

**Prerequisite(s):** 2.00 credits or (1 of PHIL*1000, PHIL*1010, PHIL*1050)

**Department(s):** Department of Philosophy

### PHIL*3040 Philosophy of Law F (3-0) [0.50]

This course is an introduction to the main topics in the philosophy of law. It aims to give students a philosophical grounding in such issues as the purpose and nature of law, the relationship between law and individual freedom and the question of international law. Thinkers studied may include St. Thomas Aquinas, John Stuart Mill and H.L.A. Hart. The course may also include an examination of the way in which controversial ethical and social issues are treated under the Canadian Charter of Rights and Freedoms.

**Prerequisite(s):** 1.50 credits in Philosophy or 7.50 credits or PHIL*2120

**Department(s):** Department of Philosophy

### PHIL*3050 Philosophy of Art W (3-0) [0.50]

This course considers various philosophical questions concerning art such as the nature of a work of art, the nature of beauty, the relationship between the artist and the audience, the task of the art critic, the social function of art.

**Offering(s):** Also offered through Distance Education format. Offered in even-numbered years.

**Prerequisite(s):** 1.50 credits in Philosophy or 7.50 credits

**Department(s):** Department of Philosophy

### PHIL*3060 Medieval Philosophy W (3-0) [0.50]

An overview of philosophical thought of the Middle Ages, that is, roughly of the period between 500 AD and 1500 AD. The course will focus on several themes from the Christian, Jewish and Islamic traditions to show that many of the philosophical concerns of the present day were also of concern to thinkers of the period. In particular, we will look at the relationship between knowledge and belief, the nature of human happiness, the question of whether God exists and, if so, whether his existence can be rationally demonstrated, and the problem of free will, among others. Thinkers to be discussed will generally include St. Augustine (354-430), St. Anselm (1033-1109), al-Farabi (ca. 850-ca. 950), Maimonides (1135-1204) and St. Thomas Aquinas (1224/25-1274).

**Offering(s):** Offered in odd-numbered years.

**Prerequisite(s):** 1.50 credits in Philosophy or 7.50 credits

**Department(s):** Department of Philosophy

### PHIL*3100 Kant and His Legacy W (3-0) [0.50]

This course offers an in-depth study of the philosophy of Immanuel Kant, one of the most influential figures in the history of philosophy. The course will include study of one or more of his major works. Kant’s works may be studied on their own, or in conjunction with the study of works of later philosophers who were significantly influenced by Kant’s philosophical ideas.

**Prerequisite(s):** 1.50 credits in Philosophy or 7.50 credits

**Restriction(s):** PHIL*3080, PHIL*3090

**Department(s):** Department of Philosophy

### PHIL*3160 Metaphysics W (3-0) [0.50]

A common way of thinking of the world is that it consists of objects with properties that persist through time while changing in different ways. Yet there are deep puzzles about each of these basic, seemingly indespensible concepts. What does it take to be an object? How much can an object change without becoming a different object? Are some of an object’s properties essential to it? Metaphysics is the business of proposing and debating answers to these questions and related questions. This course introduces students to these debates.

**Offering(s):** Offered in odd-numbered years.

**Prerequisite(s):** 1.50 credits in Philosophy or 7.50 credits

**Department(s):** Department of Philosophy

### PHIL*3170 Topics in the Philosophy of Science W (3-0) [0.50]

This course studies specialized questions about science within a broad intellectual and social context. Contested issues regarding the nature of science, its aims and methods, and science’s relation to society will be critically examined. Past offerings of the course have examined such topics as realism and antirealism, naturalized explanations, the unity/diversity of science, and feminist approaches to science.

**Prerequisite(s):** 1 of (1.50 credits in Philosophy, 7.50 credits, PHIL*2180)

**Department(s):** Department of Philosophy

### PHIL*3180 Philosophy of Mind F (3-0) [0.50]

This course is a survey of central issues and positions in contemporary philosophy of mind. Topics may include: the nature of the mind and its relation with the brain; the puzzle of conscious experience; and the problem of mental content.

**Offering(s):** Offered in odd-numbered years.

**Prerequisite(s):** 1.50 credits in Philosophy or 7.50 credits

**Department(s):** Department of Philosophy
XII. Course Descriptions, Philosophy

PHIL*3190 Epistemology F (3-0) [0.50]
This course is an advanced introduction to the central issues in epistemology, such as the nature of knowledge and how it differs from mere true belief. Possible topics include skepticism, theories of justification and rationality, self-knowledge and the sources of belief.

Offering(s): Offered in odd-numbered years.
Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy

PHIL*3200 Continental Philosophy F (3-0) [0.50]
This course focuses on 20th century French and German philosophy and the influences that shaped it. The course will be part historical, part contemporary. The historical part may survey touchstones of current Continental thought in ancient and modern philosophy. The contemporary part of this course may focus on any of the hundred or so key figures in 20th or 21st century Continental thought, or groupings thereof according to particular thematic.

Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy

PHIL*3210 Women in the History of Philosophy F (3-0) [0.50]
This course will examine selected works of women philosophers and their contributions to the major philosophical debates of their day. The philosophers covered may be drawn from any period in the history of philosophy, up to, and including, the 20th century and topics covered have ranged across feminist issues, epistemology, metaphysics, and ethics. Because texts and topics will vary with the instructor, students are advised to consult the departmental website.

Offering(s): Offered in odd-numbered years.
Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy

PHIL*3230 Theories of Justice W (3-0) [0.50]
This course will explore the relationship between human beings and language, and between language and the world. In particular, it may address such fundamental questions as: What is it about the way in which we use words that gives them the meanings they have? And what is the relationship between words and objects to which they refer? Authors studied may include representatives from the analytic and/or continental traditions in philosophy.

Offering(s): Offered in even-numbered years.
Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy

PHIL*3250 Philosophy of Language F (3-0) [0.50]
This course will explore the relationship between human beings and language, and between language and the world. In particular, it may address such fundamental questions as: What is it about the way in which we use words that gives them the meanings they have? And what is the relationship between words and objects to which they refer? Authors studied may include representatives from the analytic and/or continental traditions in philosophy.

Offering(s): Offered in even-numbered years.
Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy

PHIL*3260 Set Theory and Modal Logic U (3-0) [0.50]
Both set theory and modal logic are important tools in contemporary philosophy. Set theory is about relationships among collections of things. Modal logic elaborates the notions of necessity and possibility in formal models of different possible worlds. Students will explore these topics by producing and understanding informal proofs of important facts, and by doing exercises developing understanding of the semantics of modal logic.

Prerequisite(s): PHIL*2110
Restriction(s): PHIL*4110
Department(s): Department of Philosophy

PHIL*3280 21st Century Philosophy F (3-0) [0.50]
This course is an introduction to the most current philosophical texts and movements developed since the beginning of the 21st Century. Students will be taught to understand and work creatively with the most recent ideas in the discipline. Material covered will focus almost exclusively on the philosophical texts written in or after the year 2000.

Offering(s): Offered in odd-numbered years.
Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy

PHIL*3290 Advanced Ethical Theory F (3-0) [0.50]
This course focuses on the theoretical foundations of morality. Ethical theory comprises metaethics, which is primarily concerned with the objectivity of moral judgments; normative ethics, which is concerned with the principles of sound moral judgment, and moral psychology, which is concerned with moral motivation and moral reasoning.

Offering(s): First offering - Fall 2018
Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy

PHIL*3300 Democracy and Its Critics F (3-0) [0.50]
This course will review classical and contemporary positions on the nature and value of democracy, including arguments for and against it from a variety of stances in political philosophy. It will also examine the merits of competing models of democracy, issues dealing with limitations on majority rule in pluralistic societies, and the applicability of democracy in international contexts.

Offering(s): Offered in odd-numbered years.
Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy

PHIL*3350 Selected Topics in Philosophy U (3-0) [0.50]
The topics for this course will vary from one offering to the next, and will deal with material, such as Philosophy of History, Philosophy of Social Science and advanced Philosophy of Religion generally arising from the instructor's current research interests. This course gives students a chance to explore topics and texts not usually covered in other courses. Students are encouraged to consult the departmental website for course content and availability.

Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy

PHIL*3360 Nineteenth Century Philosophy F (3-0) [0.50]
This course provides a survey of 19th century philosophy, a period of extreme change and upheaval, championed mainly by German thinkers. The course will engage with topics such as the nature of individual freedom; historical approaches to understanding concepts of reality and moral norms; proposed radical revisions to traditional moral and social order; and confronting the possible meaninglessness or absurdity of human life.

Offering(s): First offering - Fall 2018 Offered in even-numbered years.
Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Restriction(s): PHIL*3080, PHIL*3090
Department(s): Department of Philosophy

PHIL*3410 Major Texts in the History of Philosophy W (3-0) [0.50]
This course will consider central and continuing philosophical issues through an exploration of primary texts in the history of philosophy. The readings and periods stressed will vary from year to year, but could cover significant and enduring texts from the ancient period right up to the 21st century. Texts and topics will vary with the instructor; students are advised to consult the Philosophy department's website.

Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy

PHIL*3450 Ethics in the Life Sciences W (3-0) [0.50]
This course is an advanced introduction to the ethical implications of values and practices guiding research in the life sciences. Fields of discussion may include ethics in health care, genetics and human reproduction, environmental sciences, agriculture, animal husbandry, animal welfare, and food technologies. Material covered will be drawn from current books and articles by philosophers in this rapidly expanding area.

Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits. PHIL*2120, PHIL*2180 are recommended.
Department(s): Department of Philosophy

PHIL*3710 Directed Reading F,W (3-0) [0.50]
This course is intended as an intensive course of reading chosen by the student in consultation with the faculty member.

Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Restriction(s): Instructor consent required.
Department(s): Department of Philosophy

PHIL*3910 Indian Philosophy F (3-0) [0.50]
This course provides an analysis of selected primary sources of Indian philosophy in translation, from the Vedic Upanishads to the"integral yoga" of Sri Aurobindo. Emphasis will be on the basic inspirational works of Hinduism and Buddhism, and their respective views on the ultimate nature of reality, the self, suffering, freedom, ignorance and enlightenment.

Offering(s): Offered in even-numbered years.
Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy
PHIL*3920 Chinese Philosophy W (3-0) [0.50]

This course analyzes selected primary sources of Chinese philosophy, in translation, from the 1 Ching to Mao Tse-tung. Emphasis will be on the foundational works of Confucianism, Taoism, Ch’an (or Zen) Buddhism, and Neo-Confucianism, concerning such issues as the ultimate nature of being, non-being and human destiny, proper government of the self, the family and society, and the principles and practice of enlightenment.

Offering(s): Offered in odd-numbered years.
Prerequisite(s): 1.50 credits in Philosophy or 7.50 credits
Department(s): Department of Philosophy

PHIL*4040 Advanced Philosophy of the Environment U (3-0) [0.50]

This course is an exploration in detail of central debates in environmental philosophy. Possible topics include: genetic modification of plants and animals, duties to future generations, obligations to distant global others, the ethics of encounters, animal welfare, trans-species communication, restoration and conservation projects, aesthetics, virtue ethics and stewardship.

Prerequisite(s): (PHIL*1010 or PHIL*2120), PHIL*2070
Department(s): Department of Philosophy

PHIL*4060 Philosophy of Feminism II U (3-0) [0.50]

This course is an advanced study of problems in feminist philosophy. The course may cover specific topics or the work of one or more feminist philosophers. Topics may be drawn from feminist ethics, epistemology, and/or postmodernism. Texts and topics will vary with the instructor; students are advised to consult the Philosophy department's website.

Prerequisite(s): 1.00 credits in Philosophy at the 3000 level or PHIL*2060
Department(s): Department of Philosophy

PHIL*4120 Current Debates in Language and Mind U (3-0) [0.50]

Each offering of this course will focus on a specific issue or set of related issues that are now being debated in Philosophy of mind and Philosophy of language. Readings will be contemporary works.

Prerequisite(s): 1.00 credits in Philosophy at the 3000 level or 12.50 credits
Department(s): Department of Philosophy

PHIL*4130 Current Debates in Continental Philosophy U (3-0) [0.50]

Each offering of this course will focus on close study of either one or two figures of contemporary relevance in discussions of Continental European philosophy, or a specific issue or set of related issues that are now being debated in that field.

Prerequisite(s): 1.00 credits in Philosophy at the 3000 level or 12.50 credits
Department(s): Department of Philosophy

PHIL*4140 Current Debates in Philosophy of Science U (3-0) [0.50]

Each offering of this course will focus on a specific issue or set of related issues that are now being debated in Philosophy of Science. Readings will be contemporary works.

Prerequisite(s): 1.00 credits in Philosophy at the 3000 level or 12.50 credits
Department(s): Department of Philosophy

PHIL*4160 Philosophy Field Course F (3-0) [1.00]

This variable content course addresses an issue which is relevant to the contemporary world from a range of philosophical perspectives. The course is built on research into the issue, including material gathered during a 1-2 week field trip which is held in the summer immediately preceding the semester in which the student takes the course. The field trip is a mandatory component of the course, one for which the student assumes the costs of transportation, food and lodging.

Offering(s): Offered in even-numbered years.
Prerequisite(s): 13.00 credits and a minimum cumulative average of 70%.
Restriction(s): Restricted to students in Philosophy major or minor. Instructor consent required.
Department(s): Department of Philosophy

PHIL*4230 Current Debates in Social and Political Philosophy U (3-0) [0.50]

This is an advanced level course that examines in detail selected historical or contemporary treatments of specific issues in social and political philosophy.

Prerequisite(s): 1.00 credits in Philosophy at the 3000 level or 12.50 credits
Department(s): Department of Philosophy

PHIL*4310 Applied Ethics U (3-0) [0.50]

An advanced study of specific problems in applied ethics. This is an intensive course designed for philosophy majors as well as for seventh and eighth semester students who have had no previous philosophy course.

Department(s): Department of Philosophy

PHIL*4340 Current Debates in Ethics U (3-0) [0.50]

This course offers an advanced study of problems in ethical theory. This course will examine contemporary and perennial issues in ethics through recent or historical texts. Texts and topics will vary with the instructor; students are advised to consult the Philosophy department's website.

Prerequisite(s): 1.00 credits in Philosophy at the 3000 level or 12.50 credits
Department(s): Department of Philosophy

PHIL*4360 Current Debates in Epistemology U (3-0) [0.50]

An examination of central problems concerning the nature of knowledge. In some offerings the selection will emphasize problems in the Philosophy of Language.

Prerequisite(s): 1 of (1.00 credits in Philosophy at the 3000 level, 12.50 credits, PHIL*3190)
Department(s): Department of Philosophy

PHIL*4370 Current Debates in Metaphysics U (3-0) [0.50]

An advanced study of problems concerning the nature of reality.

Prerequisite(s): 1.00 credits in Philosophy at the 3000 level or 12.50 credits
Department(s): Department of Philosophy

PHIL*4410 Major Texts in Philosophy U (3-0) [0.50]

Advanced study of a major text in philosophy not treated in either PHIL*4400 or PHIL*4420.

Prerequisite(s): 1.00 credits in Philosophy at the 3000 level
Department(s): Department of Philosophy

PHIL*4420 Major Texts in Philosophy U (3-0) [0.50]

Advanced study of a major text in philosophy not treated in either PHIL*4400 or PHIL*4410.

Prerequisite(s): 1.00 credits in Philosophy at the 3000 level
Department(s): Department of Philosophy

PHIL*4710 Directed Reading F,W (3-0) [0.50]

This course is intended as an intensive course of reading chosen by the student in consultation with the faculty member.

Prerequisite(s): 1.00 credits in Philosophy at the 3000-level
Restriction(s): Instructor consent required.
Department(s): Department of Philosophy

PHIL*4720 Directed Reading F,W (3-0) [0.50]

This course is intended as an intensive course of reading chosen by the student in consultation with the faculty member.

Prerequisite(s): 1.00 credits in Philosophy at the 3000-level
Restriction(s): Instructor consent required.
Department(s): Department of Philosophy

PHIL*4800 Honours Philosophy Research Paper I U (3-0) [0.50]

The preparation of a major research paper under the supervision of a faculty member. Normally open only to 7th semester honours philosophy students.

Prerequisite(s): 1.00 credits in Philosophy at the 3000 level
Restriction(s): Instructor consent required.
Department(s): Department of Philosophy

PHIL*4820 Philosophy Research Presentation F,W (3-0) [0.50]

The focus of this course is mastering the oral presentation of a philosophical argument, and engaging in respectful, intellectually honest discussion with one's audience. Students will develop and present a philosophical claim which they will explain and defend during a question period after the presentation. Students are expected to have topic for their presentation at the beginning of the course.

Prerequisite(s): 14.00 credits including 1.00 credits in Philosophy at the 3000-level
Restriction(s): Restricted to students in Philosophy major.
Department(s): Department of Philosophy
XII. Course Descriptions, Physics

Physics

Department of Physics

PHYS*1010 Introductory Electricity and Magnetism W (3-3) [0.50]
This is a course for engineering and physical science students on the phenomena of electromagnetism and introductory DC circuit analysis. Topics include electric charges and fields, electric potential and current, electric resistance, capacitance, inductance, magnetic fields, electric circuits, Ohm's Law, and application of Kirchhoff's Laws to node and mesh analysis of DC circuits. The course will conclude with an introduction to AC circuits.
Prerequisite(s): (1 of MATH*1080, MATH*1200), (4U Physics or equivalent )
Restriction(s): IPS*1510
Department(s): Department of Physics

PHYS*1070 Physics for Life Sciences II W (3-3) [0.50]
This course discusses physics of matter and energy at the macroscopic and microscopic levels, with special emphasis on topics of importance to the biological sciences. Topics include properties of waves, acoustics and hearing, optical systems and vision, quantum nature of radiation and its interaction with biomolecules, electricity, high energy radiation and radioactivity.
Prerequisite(s): (4U Physics or PHYS*1020 ), 4U Mathematics
Restriction(s): IPS*1510, PHYS*1130, PHYS*1300. This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Physics

PHYS*1080 Physics for Life Sciences F,W (3-3) [0.50]
This course discusses aspects of classical physics with particular emphasis on topics of importance in the biological and environmental sciences. Topics include mechanics and applications to anatomical problems, fluid statics and dynamics, molecular motion, diffusion, osmosis, and heat.
Prerequisite(s): (1 of 4U Physics, PHYS*1020 , PHYS*1300 ), 4U Mathematics
Restriction(s): IPS*1500, PHYS*1000 . This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Physics

PHYS*1130 Physics with Applications F (3-1) [0.50]
This is an introductory course for engineering students. Topics include measurement and error analysis, translational and rotational kinematics and dynamics, simple harmonic motion, waves, acoustics, and optics, with an emphasis on relevant applications of these physical concepts. The course will conclude with an introduction to quantum phenomena.
Prerequisite(s): (4U Calculus and Vectors or equivalent), (4U Physics or equivalent)
Restriction(s): IPS*1510, PHYS*1070
Department(s): Department of Physics

PHYS*1300 Fundamentals of Physics F (3-3) [0.50]
This course introduces students to fundamental phenomena in physics, with particular emphasis on applications to the biological sciences. Topics include: analyzing one-dimensional and two-dimensional motion; Newton’s laws; momentum, energy and associated conservation laws; interactions between charges, resistive direct-current circuits; the fundamentals of waves, with applications to acoustics; ionizing radiation, radioactivity and medical applications. This course is designed for students who have not completed 4U Physics (or equivalent): students with credit in 4U Physics (or equivalent) may not take this course for credit.
Restriction(s): SPIH 4U (or equivalent) PHYS*1020 PHYS*1070. This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Physics

PHYS*1600 Contemporary Astronomy F (3-0) [0.50]
This course is designed for non-science students. Emphasis will be on the interdisciplinary and contemporary aspects of astronomy with the object of providing a perspective of our place in the physical universe. Topics will include the solar system, stars and stellar evolution, pulsars, black holes, quasars and cosmology. Students are encouraged to suggest and participate in discussion on items of special interest.
Offering(s): Offered through Distance Education format only.
Restriction(s): Students with standing in any other 1000 level course credit in physics (except PHYS*1020 or PHYS*1300, PHYS*1810)) may not use this course for credit. B.Sc. students may not take this course for credit.
Department(s): Department of Physics

PHYS*1810 Physics of Music F (3-0) [0.50]
This course is designed for arts and social science students with an interest or background in music. The fundamentals of vibrations and waves will be introduced and applied to a study of archetypal instruments. The psychoacoustic basis of pitch and loudness will be discussed.
Offering(s): Offered in even-numbered years.
Equate(s): MUSC*1090
Restriction(s): Students who have standing in any 1000 level physics course, (except PHYS*1300 or PHYS*1600) may enrol in this course only if they are completing an honours or general B.A. program in Music. In this case, permission of the instructor is required.
Department(s): Department of Physics

PHYS*2030 Biophysics of Excitable Cells W (3-1) [0.50]
An intermediate biophysics course with special emphasis on the physical properties of nerve cells and of biological transducers such as the ear and the eye.
Prerequisite(s): 1.00 credits in physics (excluding PHYS*1020 , PHYS*1600, PHYS*1810)
Department(s): Department of Physics

PHYS*2180 Experimental Techniques in Physics W (3-3) [0.50]
This course is designed to aid students in the development of core practical skills in physics. Students will be required to conduct a series of experiments exploring fundamental concepts in mechanics, electricity & magnetism, thermal physics, as well as the experimental basis of quantum physics. There will be a strong emphasis on data and error analysis with a variety of software applications.
Prerequisite(s): PHYS*2330
Department(s): Department of Physics

PHYS*2240 Thermal Physics F (3-0) [0.50]
This course will introduce students to the basic ideas of thermal physics, including temperature, heat, work, thermal and diffusive equilibrium, and the Boltzmann distribution. The statistical basis for entropy and for thermodynamics will be discussed. Applications of thermodynamics to both non-interacting and interacting systems will be presented.
Prerequisite(s): (1 of IPS*1510, MATH*1210, MATH*2080 , (IPS*1500 or PHYS*1080))
Restriction(s): CHEM*2820
Department(s): Department of Physics

PHYS*2310 Mechanics W (4-0) [0.50]
This course continues building the foundation in mechanics begun in the first year. Topics include, one, two and three dimensional motion, damped and forced harmonic oscillator, gravitation and orbital motion, special relativity, noninertial reference frames, and rigid body dynamics.
Prerequisite(s): MATH*2270, (1 of IPS*1500, PHYS*1000 , PHYS*1080)
Restriction(s): PHYS*2480
Department(s): Department of Physics

PHYS*2320 Electricity and Magnetism I F (4-0) [0.50]
This course continues building the foundation in electricity and magnetism begun in the first year and is intended for students proceeding to advanced studies in the physical sciences. Topics include vector calculus, electric fields, potential, electric work and energy, Gauss’s Law, Poisson’s and Laplace’s equations, capacitors, D.C. circuits, transients and dielectric materials.
Prerequisite(s): IPS*1510 or [MATH*1210 or MATH*2080 ), (1 of PHYS*1010, PHYS*1070, PHYS*1130)]
Restriction(s): PHYS*2460
Department(s): Department of Physics

PHYS*2340 Electricity and Magnetism II W (4-0) [0.50]
This course is a continuation of PHYS*2330. Topics include magnetic fields and forces, the Biot-Savart equation, Ampere's Law, magnetic induction, LRC transients, A.C. circuits and magnetic materials.
Prerequisite(s): PHYS*2330
Restriction(s): PHYS*2470
Department(s): Department of Physics

PHYS*2600 General Astronomy F (4-1) [0.50]
An introduction to astronomy, this course covers the solar system, the sun, stellar and galactic structure.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): IPS*1500 or (1 of PHYS*1010, PHYS*1070, PHYS*1080, PHYS*1130, PHYS*1300), (1 of MATH*1030, MATH*1080, MATH*1160, MATH*1200)
Department(s): Department of Physics
PHYS*3000 Optics: Fundamentals and Applications W (3-0) [0.50]
This course will introduce students to the fundamental principles of wave and geometric optics, with an emphasis on applications. Topics will include reflection, refraction, diffraction, interference, and polarization, as well as fibre optics, imaging systems and lasers.
Prerequisite(s): PHYS*2340, PHYS*3130
Restriction(s): PHYS*3220
Department(s): Department of Physics

PHYS*3080 Energy W (3-0) [0.50]
This course covers energy resources and the production, transmission, interconversion, consumption and waste of energy in the industrial society. Emphasis is placed on environmental impact and human safety. Topics include fossil fuels, nuclear fission and fusion, wind and solar power, the hydrogen economy, and conservation strategies.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): (IPS*1500 or PHYS*1080), (1 of MATH*1000, MATH*1080, MATH*1200), (1 of IPS*1510, PHYS*1010, PHYS*1070, PHYS*1130, PHYS*1300)
Department(s): Department of Physics

PHYS*3130 Mathematical Physics F (3-0) [0.50]
This course covers a number of mathematical techniques that are required in all areas of physics. Curvilinear coordinates, special functions, Fourier series and integral transforms, Green’s functions, and a number of advanced topics will be discussed. The course emphasizes the application of these techniques to solve a variety of physics problems, providing context to the fundamental tools of the discipline.
Prerequisite(s): (1 of MATH*1160, MATH*2150, MATH*2160, MATH*2200, MATH*2270, PHYS*2310, PHYS*2340)
Department(s): Department of Physics

PHYS*3170 Radioactivity and Radiation Interactions F (3-0) [0.50]
This course will provide a fundamental understanding of radiation physics and dosimetry, as well as assist students in the development of their problem solving skills in this field. Topics will include: atomic and nuclear structure, radioactivity, interaction of radiation with matter, radiobiology, radiation dosimetry, and external radiation protection. Throughout the course, applications of radiation physics in medicine will be highlighted.
Prerequisite(s): (1 of IPS*1510, MATH*1210, MATH*2080), ( MATH*2170 or MATH*2270)
Department(s): Department of Physics

PHYS*3250 Quantum Mechanics I F (4-0) [0.50]
This course consists of a formal treatment of quantum mechanics. Topics include wave packets and free particle motion, the Schrodinger equation, harmonic oscillator, piecewise constant potentials, central forces and angular momentum, and the hydrogen atom.
Prerequisite(s): (1 of MATH*1160, MATH*2150, MATH*2160), ( MATH*2170 or MATH*2270), (PHYS*2340 or PHYS*2470)
Department(s): Department of Physics

PHYS*3400 Advanced Mechanics F (3-0) [0.50]
This course covers Lagrangian mechanics and Hamiltonian mechanics. Topics include least action principles, Poisson brackets, Liouville's theorem, Hamilton- Jacobi theory, the transition to quantum mechanics and introduction to non-linear dynamics.
Prerequisite(s): (MATH*2170 or MATH*2270), (PHYS*2310 or PHYS*2440)
Department(s): Department of Physics

PHYS*3510 Intermediate Laboratory F,W (0-6) [0.50]
This modular course consists of experiments in modern and classical physics. Modules include laboratory instrumentation employing computers, modern physics, waves and optics, molecular physics, biophysics, and solid state physics.
Prerequisite(s): PHYS*2180 or (NANO*2100, PHYS*2310)
Department(s): Department of Physics

PHYS*4001 Research in Physics F (0-6) [0.50]
This course is the first part of the two-semester course PHYS*4001/2. Refer to PHYS*4001/2 for the course description.
Prerequisite(s): PHYS*3510
Restriction(s): PHYS*4510. Instructor consent required.
Department(s): Department of Physics

PHYS*4001/2 Research in Physics F-W (0-6) [1.00]
This is a two-semester (F-W) course in which students apply their knowledge and skills through independent research of an experimental or theoretical nature within physics. Students will be required to present their results in both oral and written reports. Students must make arrangements with a faculty supervisor and obtain approval of the course co-ordinator before course selection. Approval of the course co-ordinator will only be granted upon receipt of a completed registration form, available from the co-ordinator during the course selection period. This is a two-semester course offered over consecutive semesters. When you select it, you must select PHYS*4001 in the Fall semester and PHYS*4002 in the Winter semester. A grade will not be assigned to PHYS*4001 until PHYS*4002 has been completed.
Prerequisite(s): PHYS*3510
Restriction(s): PHYS*4510. Instructor consent required.
Department(s): Department of Physics

PHYS*4002 Research in Physics W (0-6) [0.50]
This course is the second part of the two-semester course PHYS*4001/2. Refer to PHYS*4001/2 for the course description.
Prerequisite(s): PHYS*4001
Department(s): Department of Physics

PHYS*4040 Quantum Mechanics II W (3-0) [0.50]
This is a second course in quantum mechanics. Topics include spin and two-level systems, quantum systems of multiple particles, quantum description of fermions and bosons, time-independent perturbation theory, and the fine structure of hydrogen.
Prerequisite(s): PHYS*3230
Department(s): Department of Physics

PHYS*4070 Clinical Applications of Physics in Medicine W (3-0) [0.50]
This course provides an overview of the application of physics to medicine. The physical concepts underlying the diagnosis and treatment of disease will be explored. Topics will include general imaging principles such as resolution, intensity, and contrast; x-ray imaging and computed tomography; radiotopes and nuclear medicine, SPECT and PET; magnetic resonance imaging; ultrasound imaging and radiation therapy.
Prerequisite(s): PHYS*3170
Restriction(s): PHYS*4560
Department(s): Department of Physics

PHYS*4120 Atomic and Molecular Physics F (3-0) [0.50]
The application of quantum theory to atomic and molecular structure, and the interaction between electromagnetic radiation and atoms and simple molecules.
Prerequisite(s): PHYS*4040
Department(s): Department of Physics

PHYS*4130 Subatomic Physics W (3-0) [0.50]
This course surveys the field of subatomic physics from radioactive emanations to conjectured subunits of nucleons. Topics include quark models; strong, electromagnetic and weak interactions; isospin, strangeness, conservation laws and symmetry principles; systematics of nuclear properties, nuclear radioactivity, nuclear models and reactions.
Prerequisite(s): PHYS*4040
Department(s): Department of Physics

PHYS*4150 Solid State Physics W (3-0) [0.50]
The topics covered in this course include: bonding in solids, thermal and electrical properties of solids, energy bands, imperfections in solids, properties of semiconductors and insulators.
Prerequisite(s): PHYS*4040, PHYS*4240
Department(s): Department of Physics

PHYS*4180 Advanced Electromagnetic Theory F (3-0) [0.50]
This course covers Maxwell's equation, Lorentz-force law, conservation of charge, and conservation of energy (Poynting's theorem). In addition, the course will discuss potentials, gauge transformations, wave equations, and multipole expansions as well as Green's functions for the Poisson and wave equations. Additional topics include electrostatics and magnetostatics (including boundary-value problems), motion of charged particles in electromagnetic fields, and propagation and generation of electromagnetic waves.
Prerequisite(s): (PHYS*2340 or PHYS*2470)
Department(s): Department of Physics

PHYS*4240 Statistical Physics II F (3-0) [0.50]
A continuation of PHYS*2240 including a discussion of the grand canonical distribution, quantum statistics, and transport theory.
Prerequisite(s): (PHYS*2240 or PHYS*3240), PHYS*3230
Department(s): Department of Physics

2019-2020 Undergraduate Calendar

XII. Course Descriptions, Physics
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS*4500</td>
<td>Advanced Physics Laboratory F,W (0-6) [0.50]</td>
<td>This is a modular course for students in any physics-related major in which techniques of nuclear, solid state and molecular physics will be studied.</td>
<td>Department of Physics</td>
</tr>
<tr>
<td>PHYS*4540</td>
<td>Molecular Biophysics W (3-0) [0.50]</td>
<td>Physical methods of determining macromolecular structure: energetics, intramolecular and intermolecular forces, with applications to lamellar structures, information storage, DNA and RNA, recognition and rejection of foreign molecules.</td>
<td>Department of Physics</td>
</tr>
<tr>
<td>PHYS*4910</td>
<td>Advanced Topics in Physics I U (3-0) [0.50]</td>
<td>The content of this course is determined by the interests of the students. Possible topics include fluid mechanics, theory of elastic solids, general relativity, astrophysics, and chaos. This course is not offered every year.</td>
<td>Department of Physics</td>
</tr>
<tr>
<td>PHYS*4920</td>
<td>Advanced Topics in Physics II U (3-0) [0.50]</td>
<td>The content of this course is determined by the interests of the students. Possible topics include fluid mechanics, theory of elastic solids, general relativity, astrophysics, and chaos. This course is not offered every year.</td>
<td>Department of Physics</td>
</tr>
<tr>
<td>PHYS*4930</td>
<td>Advanced Topics in Physics III U (3-0) [0.50]</td>
<td>The content of this course is determined by the interests of the students. Possible topics include fluid mechanics, theory of elastic solids, general relativity, astrophysics, and chaos. This course is not offered every year.</td>
<td>Department of Physics</td>
</tr>
</tbody>
</table>
Physiology

Department of Biomedical Sciences

For course listings and descriptions see Biomedical Sciences.

Additional course listings may be found in the course descriptions for Veterinary Medicine and Human Kinetics.
# Plant Biology

**School of Environmental Sciences**

**Department of Plant Agriculture**

## PBIO*3110 Crop Physiology W (3-3) [0.50]

This course examines the physiological basis of crop yield determination, with emphasis on phenomena that express themselves at the whole canopy (rather than single plant) level of organization. It covers canopy scale measurements of crop growth, development, and solar radiation capture; photosynthesis, beginning at the level of biochemistry and working up to the whole canopy scale; how photoassimilates are used in the processes of respiration, growth and yield formation; and crop - environment interactions, including water stress, nutrient uptake and utilization, and light quality effects on photomorphogenesis.

**Prerequisite(s):** 1 of BIOL*1050, BIOL*1070, BIOL*1090  
**Department(s):** Department of Plant Agriculture

## PBIO*3750 Plant Tissue Culture F (2-3) [0.50]

This course examines and discusses the principles, protocols and utilization of plant cell tissue culture systems. In vitro propagation and regeneration, mutagenesis and selection, secondary metabolite elicitation and cell transformation techniques including protoplast fusion, direct DNA uptake and plant bacterial co-cultivation will be emphasized.

**Prerequisite(s):** AGR*2470 or BOT*2100  
**Department(s):** Department of Plant Agriculture

## PBIO*4000 Molecular and Cellular Aspects of Plant-Microbe Interactions F (3-0) [0.50]

This course examines molecular and cellular aspects of the interaction between plants and microorganisms such as mycorrhizae, pathogenic fungi, Agrobacterium, pathogenic bacteria, and plant viruses. Topics include microbial virulence, signaling, gene expression, and disease resistance in plants.

**Prerequisite(s):** 1 of BOT*2100, MICR*2030, (BIOL*1070, BIOL*1090, MBG*2040)  
**Department(s):** School of Environmental Sciences

## PBIO*4070 Biological and Cultural Control of Plant Diseases W (3-0) [0.50]

This course examines current concepts and approaches to managing plant pathogens and diseases in crops and natural plant communities by measures that have minimal impact on the environment. Topics include naturally-occurring biological control such as suppressive soils and induced host resistance, use of microbial agents and their modes of action, transgenic disease resistance, use of organic soil amendments and mulches to promote microbial diversity and suppress pathogens, and effects of sanitation, crop sequences, tillage, flooding, soil solarization and other cultural practices on microbial communities, including pathogens and on disease epidemics.

**Prerequisite(s):** 1 of ENVB*3210, ENVS*3210, MICR*3090, MICR*3220  
**Equate(s):** ENVB*4070  
**Department(s):** Department of Plant Agriculture

## PBIO*4150 Molecular and Cellular Aspects of Plant Development W (3-0) [0.50]

This course explores current concepts and approaches to managing plant pathogens and diseases in crops and natural plant communities by measures that have minimal impact on the environment. Topics include naturally-occurring biological control such as suppressive soils and induced host resistance, use of microbial agents and their modes of action, transgenic disease resistance, use of organic soil amendments and mulches to promote microbial diversity and suppress pathogens, and effects of sanitation, crop sequences, tillage, flooding, soil solarization and other cultural practices on microbial communities, including pathogens and on disease epidemics.

**Offering(s):** Offered in even-numbered years.  
**Prerequisite(s):** (AGR*2470 or BOT*2100), (MBG*2040 or MBG*2400)  
**Department(s):** Department of Plant Agriculture

## PBIO*4290 Cannabis Production W (3-0) [0.50]

This course covers the essential biology and biochemistry of cannabis (Cannabis sativa), as well as the science and technologies of propagation, cultural management and production, postharvest storage and processing of the plant, and the potential environmental impacts and related remediation technologies. It will also discuss the history of cultivation and uses of the plant, and current legislation of cannabis production and consumption in different cultures/countries. Students will learn through lectures (including guest lectures), hands-on laboratory practices, site visits, literature research and presentations, and group discussions.

**Prerequisite(s):** 14.50 credits including CHEM*1040, ENVS*3300, (ENVS*2040 or ENVS*3210)  
**Department(s):** Department of Plant Agriculture

## PBIO*4530 Plants and Environmental Pollution W (3-0) [0.50]

This course analyzes the environmental pollution effects on physiological and ecological processes of plants, in both managed and unmanaged ecosystems. Pollutants under study include contaminants of air (such as ozone, sulphur dioxide, NOx) and soil (such as metals). This course also covers how to use plants to improve air (both indoor and outdoor), water and soil environment. The format includes both lecture and presentation/discussion of current and historical peer-reviewed literature.

**Prerequisite(s):** (1 of BIOL*2060, BOT*2100, ENVM*1200, ENVS*2040, ENVS*2330, PBIO*3110), CHEM*1040  
**Department(s):** School of Environmental Sciences

## PBIO*4750 Genetic Engineering of Plants W (3-3) [0.50]

This course provides an examination and discussion of the principles, protocols and applications of molecular biology and transformation technology to the genetic improvements of plants.

**Prerequisite(s):** (AGR*2470 or BOT*2100), (MBG*2040 or MBG*2400)  
**Department(s):** Department of Plant Agriculture
Political Science

Department of Political Science

For courses without semester designations, please check with the department. Advance schedules are available in the department.

The department works in cooperation with the department of Political Science at the University of Waterloo to offer courses via the video link classroom. These courses are identified by the designation LINK in their course description. Further information can be obtained from the department.

POLS*1150 Understanding Politics F,W (3-1) [0.50]

This is the recommended introductory course for students intending to pursue a specialization in Political Science. An introduction to the basic concepts of politics, such as liberty, equality, social justice, constitutionalism, sovereignty, federalism, parliamentary versus presidential government. The course will emphasize the meaning and use of these terms within Canada in the context of other political systems.

Restriction(s): POLS*1000, POLS*1300
Department(s): Department of Political Science

POLS*1400 Issues in Canadian Politics F (3-0) [0.50]

Through the lens of contemporary political issues, this course will examine the pillars of the Canadian political system - Parliamentary government, federalism and the Charter of Rights and Freedoms - and how they reflect and affect the distinctly Canadian societal cleavages: linguistic, regional, ethnic, national, and sexual. Students will develop an awareness and understanding of these concepts, institutions and processes, which will enhance their ability to interpret current political events and provide a foundation upon which to explore Canadian politics, identity, public policy and governance in upper level political science courses.

Offering(s): Also offered through Distance Education format.
Department(s): Department of Political Science

POLS*1500 World Politics F (3-0) [0.50]

An examination of the fundamental patterns of international politics, focusing especially on the major issues and contemporary events at the root of international conflict. As well, the reality of globalization and interdependence is assessed in terms of the alternative patterns of international cooperation in the contemporary world.

Offering(s): Also offered through Distance Education format.
Department(s): Department of Political Science

POLS*2000 Political Theory F (3-0) [0.50]

A study of the philosophic and ideological developments which have led to the emergence of the modern state and contemporary politics.

Offering(s): Offered through Distance Education format only.
Restriction(s): PHIL*2280
Department(s): Department of Political Science

POLS*2080 Development and Underdevelopment F (3-0) [0.50]

An examination of the politics of development, distribution and conflict in Africa, Asia, the Middle East and the Americas from a comparative and international perspective.

Department(s): Department of Political Science

POLS*2100 Comparative Politics W (3-0) [0.50]

An examination of the evolution, purposes, structures and functions of the state in relation to the economy and civil society.

Department(s): Department of Political Science

POLS*2150 Gender and Politics W (3-0) [0.50]

This course introduces students to competing approaches to gender and politics. Students will examine the interrelationship of gender, politics and the state, focusing on its implications for political mobilization, representation and participation, public policy, global gender issues in international relations, and cultural and regional differences in gender politics. The course provides the student with the conceptual and analytical tools for upper-year courses on politics and gender, sexuality and politics in particular.

Department(s): Department of Political Science

POLS*2200 International Relations F (3-0) [0.50]

An introduction to basic theories and concepts in the study of international relations, including an analysis of power, national interest, security, survival, nationalism, sovereignty, decision-making, interdependence, integration, and transnationalism.

Department(s): Department of Political Science

POLS*2250 Public Administration and Governance W (3-0) [0.50]

The course explores, from both practical and theoretical perspectives, planning and implementation of programs and services through government departments and agencies and "alternative" processes and structures, sometimes involving non-governmental actors. The course critically evaluates the changing role of bureaucracy; financial and human resource management; and the evolving concepts of responsibility and accountability.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): POLS*1150 or POLS*1400
Department(s): Department of Political Science

POLS*2300 Canadian Government and Politics F,W (3-0) [0.50]

This course explores the core institutions of Canadian government, including parliamentary government, federalism, the Charter of Rights and Freedoms and electoral systems. How these institutions shape and are shaped by political parties and social forces, as well as current issues like Quebec nationalism, identity politics and Aboriginal governance, are covered.

Offering(s): Also offered through Distance Education format.
Department(s): Department of Political Science

POLS*2350 Law from a Political Science Perspective F (3-0) [0.50]

This course will consider law as both the output of political action and as the structure in which political action occurs. It will introduce students to core legal concepts, explore the impact of law on private and public actors, and help students develop legal research skills.

Prerequisite(s): POLS*1150 or POLS*1400
Department(s): Department of Political Science

POLS*2650 Political Inquiry and Research Methods F (3-0) [0.50]

This course offers an introduction to the principles of inquiry in political science. Students will study the crucial components of research and engage subjects such as theorization, research ethics, conceptualization, operationalization, research design, case selection, and both quantitative and qualitative methods of data collection.

Prerequisite(s): 4.00 credits including POLS*1150
Restriction(s): POLS*3180
Department(s): Department of Political Science

POLS*3000 Politics of Africa U (3-0) [0.50]

Africa in the 20th Century has been the scene of rapid political and economic change. This course analyzes African politics in the light of contemporary problems of development and modernization.

Prerequisite(s): 1 of IDEV*2000, POLS*2080, POLS*2100
Department(s): Department of Political Science

POLS*3050 Canadian Campaigns & Elections W (3-0) [0.50]

This course provides an introduction to the electoral process in Canada. It will explore factors that explain citizens’ vote choices and the strategies used by candidates and their campaigns to win these votes. The course integrates literature on the electoral system, campaign financing, political parties, political communication, and voting behaviour.

Prerequisite(s): POLS*1400 or POLS*2300
Department(s): Department of Political Science

POLS*3060 Politics of the Middle East and North Africa U (3-0) [0.50]

Students will examine the political dynamics of selected states and societies (e.g. Egypt, Syria, Saudi Arabia, Iran, Israel, Jordan and Algeria) in the Middle East and North Africa (MENA). Issues to be covered: the impact of early Middle Eastern/North African history upon today's politics; class structures in the MENA countries and their impact on politics; the rise of Arab nationalism; Zionism; the politics of oil; the status of women; the political impact of economic restructuring; Islamic movements; state-building; and political liberalization and democratization in the Middle East and North Africa.

Prerequisite(s): 1 of IDEV*2000, POLS*2080, POLS*2100
Department(s): Department of Political Science

POLS*3080 Politics of Latin America U (3-0) [0.50]

An exploration of Latin American politics from a multidimensional perspective. It analyzes the interaction among contemporary political structures, ideologies and processes in the context of socio-economic change.

Prerequisite(s): 1 of IDEV*2000, POLS*2080, POLS*2100
Department(s): Department of Political Science

POLS*3130 Law, Politics and Judicial Process U (3-0) [0.50]

This course emphasizes the study of the judicial system as a branch of government and highlights the interaction between the judiciary, law, the political process and public policy. Issues such as judicial selection and Charter of Rights decisions by courts will be explored. Comparisons with the judicial process in other countries will supplement the focus on the Canadian judicial process.

Prerequisite(s): 1 of POLS*2350, POLS*2250, POLS*2300
Department(s): Department of Political Science

2019-2020 Undergraduate Calendar

Last Revision: July 4, 2019
XII. Course Descriptions, Political Science

POLS*3140 Canadian Charter of Rights and Freedoms W (3-0) [0.50]
This course examines the legal and political effects of the Canadian Charter of Rights and Freedoms. Issues to be examined may include the Charter’s influence on Canadian political culture and identity, interest groups and social movements, the power of the courts, and public policy. Analysis of specific Charter sections and judicial decisions along with comparisons to other countries will be used to aid the analysis.
Prerequisite(s): POLS*2300 or POLS*2350
Department(s): Department of Political Science

POLS*3160 Global Gender Justice F (3-0) [0.50]
This course will introduce students to theories and concepts of gender justice and women’s political empowerment in the Global South, the Global North, and across borders. It will also examine selected topics and cases such as political representation, gender and culture, religion, nationalism, gender and disability, household authority, and reproductive rights.
Prerequisite(s): POLS*2080 or POLS*2100
Department(s): Department of Political Science

POLS*3210 The Constitution and Canadian Federalism S,W (3-0) [0.50]
Canada’s constitution and its federal system lie at the heart of the ongoing crisis facing the Canadian Confederation. This course examines the major features of our constitutional development, how the current system of intergovernmental relations has evolved, and the challenges posed by Canada’s cultural diversity, pressures for decentralisation, and the maintenance of national sovereignty.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): HIST*2600 or POLS*2300
Department(s): Department of Political Science

POLS*3230 Modern Political Thought W (3-0) [0.50]
This course explores the impact of modern science and technology, and its impact on the western tradition of justice from the seventeenth century to the twentieth century. It will explore this theme in writers such as Thomas Hobbes, Jonathan Swift, J-J Rousseau, Edmund Burke, Friedrich Nietzsche and George Grant. The exact selection of thinkers will vary from year to year and students are advised to check the course outline.
Prerequisite(s): POLS*2000 or POLS*2280
Restriction(s): POLS*3021
Department(s): Department of Political Science

POLS*3250 Public Policy: Challenges and Prospects F (3-0) [0.50]
This course covers the dominant theories that explain the origins and character of public policy in Canada, and other countries. The focus will be on both governmental and nongovernmental actors.
Prerequisite(s): POLS*1400 or POLS*2250
Department(s): Department of Political Science

POLS*3270 Local Government in Ontario U (3-0) [0.50]
Municipal governments are major spenders of public funds in Canada, and are also the level of government closest to the people. In this course, students will examine the major problems confronting urban government in Ontario.
Prerequisite(s): 7.50 credits
Department(s): Department of Political Science

POLS*3300 Governing Criminal Justice U (3-0) [0.50]
The course provides an overview of the policy process and outcomes of the Canadian criminal justice system. Particular emphasis is placed on examining, using various public policy and public management perspectives, the practices and interactions of governmental agencies within the system, such as police agencies and boards, departments of Justice, Solicitor-General, corrections and parole agencies, courts and the legal profession.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 1 of POLS*2350, POLS*2250, POLS*2300
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*3320 Politics of Aid & Development F (3-0) [0.50]
This course examines the motivations and mechanisms by which industrialized states have designed and implemented foreign aid programs and policy, primarily since the end of the Second World War. Particular emphasis will be placed on the role of multilateral, bilateral and nongovernmental organizations in the delivery of development assistance and humanitarian relief.
Prerequisite(s): IDEV*2000 or POLS*2080
Department(s): Department of Political Science

POLS*3370 Environmental Politics and Governance S,F (3-0) [0.50]
This course examines environmental politics and governance in Canada as well as in comparative and international contexts. This is accomplished by surveying how various political, legal, administrative, and private-public actors and processes influence the development and implementation of environmental policy.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 7.50 credits
Department(s): Department of Political Science

POLS*3410 U.S. Politics and Government U (3-0) [0.50]
This course involves a treatment of the basic principles and institutions of national government and politics in the United States as well as the making and execution of public policy at the national and state levels.
Prerequisite(s): POLS*2100 or POLS*2300
Department(s): Department of Political Science

POLS*3440 Corruption, Scandal and Political Ethics U (3-0) [0.50]
This course will introduce students to the phenomenon of political corruption and the study of its incidence. Attention will be paid to historical examples, contemporary scandals, and analytical articles, dealing with the nature, causes and effects, and proposed cures of political corruption, and the ethical dilemmas inherent in political life.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 5.00 credits
Department(s): Department of Political Science

POLS*3450 European Governments and Politics F (3-0) [0.50]
Europe has forged a new form of political organization, the European Union, in addition to its variety of national democratic forms. This course offers a comparative examination of selected national governments, as well as an exploration of this new supra-national organization.
Prerequisite(s): 4.00 credits including 1 of EURO*1050, POLS*2100, POLS*2200
Department(s): Department of Political Science

POLS*3470 Business-Government Relations in Canada U (3-0) [0.50]
The public and private sectors in Canada have become more and more interrelated in recent years as evidenced by tax and expenditure policies, the role of regulation and public enterprise, and the increasing emphasis on consultation and co-ordination. This course examines the evolving relationship between governments and the private sector in Canada, including business (both large and small), organized labour, specific sectors such as agriculture and consumer affairs and voluntary organizations.
Prerequisite(s): POLS*1400 or POLS*2250
Department(s): Department of Political Science

POLS*3490 Conflict and Conflict Resolution F (3-0) [0.50]
This course will examine the growing body of literature which considers violent conflict and its management. Materials are organized to reflect the trajectory of many contemporary conflicts: from explanations for violence, to identifying conditions and means to resolve conflict and, finally, to post-conflict governance.
Prerequisite(s): 1 of POLS*1500, POLS*2100, POLS*2200
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*3650 Quantitative Methods of Data Analysis W (3-0) [0.50]
This course examines quantitative research methods of data analysis used in political science. Students learn how to apply basic descriptive and inferential statistical procedures to research political problems and test hypotheses. In lab, students will acquire the skills to perform data analysis
Prerequisite(s): 1 of POLS*2650, POLS*3180, SOAN*2120
Restriction(s): Registration in Criminal Justice & Public Policy or Political Science (major, minor or area of concentration) or International Development (major only).
Department(s): Department of Political Science

POLS*3670 Comparative Public Policy and Administration W (3-0) [0.50]
This course examines the role of the bureaucracy in national development in various economic, social and political environments. The focus of the course is the interplay between bureaucracy, democracy and development in a comparative perspective.
Prerequisite(s): 1 of IDEV*2010, IDEV*2500, POLS*2080, POLS*2100, POLS*2250
Department(s): Department of Political Science
POLS*3710 Politics and Sexuality U (3-0) [0.50]
Sexuality is treated as a subject for political theory from a number of critical and interdisciplinary perspectives. The course examines the relationship between sexuality and politics by analyzing the dynamics of power in the context of sexuality.
Prerequisite(s): POLS*2000 or PHIL*2060
Department(s): Department of Political Science

POLS*3790 International Political Economy W (3-0) [0.50]
This course examines major features of the contemporary international political economy, treating major theories and concepts within this approach to international relations (hegemony, globalization, interdependence, world systems theory, etc.) and focusing on the operation of key international institutions and regimes (i.e. communications, trade and transport policy).
Prerequisite(s): 1 of IDEV*2000, IDEV*2010, IDEV*2500, POLS*2080, POLS*2100, POLS*2200
Department(s): Department of Political Science

POLS*3850 Experiential Learning in Political Science U (3-0) [0.50]
This course allows students to reflect upon their involvement in some form of politically related activity, including simulations, volunteer programs, or internship work with government or non-government organizations. The student must find a faculty member from the Department of Political Science willing to act as a supervisor for the course. See the Political Science website for the learning contract and other requirements that must be completed in advance of registering for this course.
Prerequisite(s): Minimum of 10.00 credits, 2.00 of which must be in Political Science.
Restriction(s): Approval of the experience and evaluation criteria by the Undergraduate Committee of the Department of Political Science. Instructor consent required.
Department(s): Department of Political Science

POLS*3890 Government and Politics of India W (3-0) [0.50]
The course is designed to provide a survey of the history, society, culture, politics, government, bureaucracy and foreign relations of India.
Prerequisite(s): 1 of POLS*2080, POLS*2100, POLS*2200
Department(s): Department of Political Science

POLS*3920 Politics of China F (3-0) [0.50]
This course is a detailed study of the political history of modern China and its current politics. The main objective is to assess the extent to which the Chinese Communist Party has fulfilled its mandate, which is to build a sovereign and united China as well as to modernize the country within a socialist framework.
Prerequisite(s): 1 of POLS*2080, POLS*2100, POLS*2200
Department(s): Department of Political Science

POLS*3960 Selected Topics in Political Science S,F,W (3-0) [0.50]
Readings and research in selected areas of the discipline not covered by regular course offerings. Students present a proposal and seek approval from a member of the department in the semester previous to enrolment in this course. The method of course presentation, emphasis, and evaluation are at the discretion of the instructor.
Prerequisite(s): 1.50 credits at the 3000 level in Political Science or equivalent
Restriction(s): Instructor consent required.
Department(s): Department of Political Science

POLS*4030 Contemporary Political Theory U (3-0) [0.50]
This course provides an analysis of selected theories and political issues discussed by prominent 20th-Century thinkers. These contemporary works will be examined as part of the long tradition of political discourse dating back to the classical period.
Prerequisite(s): POLS*2000 and at least 1.00 credits at the 3000 level in the Political Thought stream.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4050 Advanced Topics in Law and Politics U (3-0) [1.00]
This course explores advanced topics in law and politics depending on the interests of the instructor. Potential topics include investigating the law and politics of social change or analyzing debates about the political power of courts in Canada or in comparative perspectives.
Prerequisite(s): POLS*3130, (0.50 credits at the 3000-level in the Law, Policy and Governance stream or the Comparative Politics stream).
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4060 Advanced Topics Lecture in Law and Politics F,W (3-0) [0.50]
This advanced lecture course explores topics in law and politics. Specific topics vary depending on the interests of the instructor. Potential topics include the relationship between law and social change, human rights, the relationship between law and power, judicial decision-making, and the relationship between law, class, gender, race, and sexuality.
Prerequisite(s): 1 of POLS*2350, POLS*3130, POLS*3140, POLS*3300
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4070 Courts and Parliament F,W (3-0) [1.00]
The course critically examines the complex relationship between the judiciary and representative institutions. By comparing the treatment of current political controversies (assisted suicide, prostitution, drug treatment), students will better appreciate the often-subtle exchanges between the two institutions and further enhance their research abilities in regards to both legal and legislative processes.
Prerequisite(s): 1 of POLS*2350, POLS*3130, POLS*3300
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4100 Women, Justice and Public Policy U (3-0) [1.00]
This course will use gender-based analysis in examining a series of justice and public policy issues affecting the lives of women, including equality rights, pay and employment equity, domestic violence, sexual assault, family policy, health care policy, and pornography. How do current policies that developed out of neoliberalism influence the lives of women in different ways than men? How can/should they be changed to recognize the different life experiences of women as distinguished from men? The primary focus of the topics covered in this course will be Canadian, although the experiences in other countries will be covered, particularly as it relates to "best practices," where appropriate.
Prerequisite(s): 2 of POLS*2250, POLS*2300, POLS*3250 and 1.00 credits in the Public Policy, Governance and Law or Canadian Politics.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4140 Conceptions of Canada W (3-0) [1.00]
This course will explore evolving conceptions of Canadian identity and nationalism through consideration of political culture, institutions and constitutional arrangements. Possible topics include: multiculturalism, Aboriginal identity and community, Quebec nationalism, social citizenship, rights and representation, as well as Canada's global role and significance.
Prerequisite(s): POLS*2300 and 1.00 credits at the 3000 level in the Canadian Politics stream.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4150 Advanced Lecture in Conceptions of Canada W (3-0) [0.50]
This advanced lecture course will explore evolving conceptions of Canadian identity and nationalism through a consideration of political culture, institutions, and constitutional arrangements. Possible topics include: multiculturalism, Aboriginal identity and community, Quebec nationalism, social citizenship, rights and representation, as well as Canada's global role and significance.
Prerequisite(s): POLS*2300, (2 of HIST*3160, POLS*3050, POLS*3210, POLS*3270, POLS*3470)
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science
POLS*4160 Multi-Level Governance in Canada U (3-0) [1.00]
This course considers the evolving relationship among levels of government in Canada. The growth of cities, the growth of policy responsibilities of provinces, the influence of international organizations, and the development of First Nations government in Canada all challenge the conventional study of federal-provincial relations in Canada. From year to year, this course examines one or several of these contemporary dynamics.
Prerequisite(s): POLS*2300 and 1.00 credits at the 3000 level in the Canadian Politics stream.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4200 International Political Economy U (3-0) [1.00]
The course relies on theoretical approaches in IPE to examine relationships between politics and economics across national and regional levels. The evolution of the global political economy and its governance structures is explored, as well as contemporary debates about globalization and state and non-state actors’ responses. Issue-areas may include: money and power, technology, trade, development and the environment.
Prerequisite(s): (1 of POLS*2080, POLS*2100, POLS*2200); and at least 1.00 credits at the 3000 level in the International Relations and Global Studies stream.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4250 Topics in Public Management W (3-0) [1.00]
This course will examine various topics related to governance, such as public management reform, public sector leadership, third sector organizations or budgeting and human resources.
Prerequisite(s): POLS*2250 and 1.00 credits at the 3000 level in the Public Policy, Governance and Law stream or the Canadian Politics stream.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4260 Topics in Public Policy U (3-0) [1.00]
This course will examine various public policy issues such as social policy or health care policy in a Canadian or comparative context.
Prerequisite(s): (2 of POLS*2250, POLS*2300, POLS*3250), 1.00 credits in the Public Policy, Governance and Law stream or the Canadian Politics stream.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4270 Advanced Lecture in Public Management F (3-0) [0.50]
This advanced lecture course examines various topics related to governance, such as public management reform, public sector leadership, third sector organizations, or budgeting and human resources.
Prerequisite(s): POLS*2250, (2 of HIST*3160, POLS*3050, POLS*3130, POLS*3210, POLS*3250, POLS*3270, POLS*3300, POLS*3370, POLS*3440, POLS*3470, POLS*3670)
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information. Students may not receive credit for both POLS*4250 and POLS*4270
Department(s): Department of Political Science

POLS*4280 Advanced Lecture in Public Policy W (3-0) [0.50]
The advanced lecture course will examine various public policy issues, such as social policy, health care policy, environmental policy, or economic policy in a Canadian or comparative context.
Prerequisite(s): (2 of POLS*2250, POLS*2300, POLS*3250), (2 of HIST*3160, POLS*3050, POLS*3130, POLS*3210, POLS*3270, POLS*3300, POLS*3370, POLS*3440, POLS*3470, POLS*3670)
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information. Students may not receive credit for both POLS*4260 and POLS*4280
Department(s): Department of Political Science

POLS*4300 Human Rights, Ethics, and Development W (3-0) [1.00]
This course will examine the political and ethical consequences of adopting a human rights framework in national and international contexts by both state and non-state actors. This subject will be explored from a range of historical, theoretical and practical perspectives.
Prerequisite(s): (1 of POLS*2080, POLS*2100, POLS*2200), 1.00 credits at the 3000 level in Political Science.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4310 Advanced Lecture in Women, Justice and Public Policy F/W (3-0) [0.50]
This advanced lecture course will use gender-based analysis in examining a series of justice and public policy issues affecting the lives of women, including equality rights, pay and employment equity, domestic violence, sexual assault, family policy, health care policy and pornography. The primary focus of the topics covered in the course will be Canadian, although the experiences of women in other countries will be covered, particularly as it relates to "best practices" where appropriate.
Prerequisite(s): (2 of POLS*2250, POLS*2300, POLS*2350, POLS*3250), (2 of HIST*3160, POLS*3050, POLS*3130, POLS*3210, POLS*3270,POLS*3300, POLS*3370, POLS*3440, POLS*3470, POLS*3670)
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information. Students may not receive credit for both POLS*4100 and POLS*4320
Department(s): Department of Political Science

POLS*4320 Advanced Lecture on Human Rights, Ethics and Development F (3-0) [0.50]
This advanced lecture course examines the political and ethical consequences of adopting a human rights framework in national and international contexts by both state and non-state actors. This subject will be explored from a range of historical, theoretical and practical perspectives.
Prerequisite(s): (1 of POLS*2080, POLS*2100, POLS*2200), 1.00 credits at the 3000 level in Political Science.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information. Students may not receive credit for both POLS*4300 and POLS*4320
Department(s): Department of Political Science

POLS*4340 Nationalism, State-building and Identity U (3-0) [1.00]
The course examines the role of nationalism in contemporary politics. Nationalism as such is understood as a major political force in state-building. Its impact on both global and national politics is assessed in relation to other forms of identity-based politics.
Prerequisite(s): (1 of POLS*2000, POLS*2100, POLS*2200), (0.50 credits at the 3000 level in the Comparative Politics stream or 0.50 credits at the 3000 level in the International Relations and Global Studies stream).
Department(s): Department of Political Science

POLS*4370 Topics in Comparative Politics U (3-0) [1.00]
This course considers theories and problems in comparative politics and government in developing and industrialized countries. The geographical and theoretical focus of the course will reflect the interests of the instructor.
Prerequisite(s): (POLS*2080 or POLS*2100) and 1.00 credits at the 3000 level in the Comparative Politics stream.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4710 Topics in International Relations U (3-0) [1.00]
This course considers theories and problems in the field of International Relations. The theoretical and/or geographical focus of the course will reflect the interests of the instructor.
Prerequisite(s): POLS*2200 and 1.00 credits at the 3000 level in the International Relations and Global Studies stream.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science

POLS*4720 Topics in International Relations U (3-0) [1.00]
This course considers the evolving relationship among levels of government in Canada. The growth of cities, the growth of policy responsibilities of provinces, the influence of international organizations, and the development of First Nations government in Canada all challenge the conventional study of federal-provincial relations in Canada. From year to year, this course examines one or several of these contemporary dynamics.
Prerequisite(s): POLS*2300 and 1.00 credits at the 3000 level in the Canadian Politics stream.
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.
Department(s): Department of Political Science
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS*4730</td>
<td>International Relations of the Middle East</td>
<td>This course is an introduction to the international relations of the Middle East. The course focuses on theories of international relations and their applicability to specific case studies of Middle Eastern politics. The course provides a critical examination of conflicts in the region, and contextualizes those conflicts within both realist and neo-realist theories of international relations. The course also provides a critical examination of the Arab-Israeli crisis, with a focus on peace negotiations. The course is offered as a seminar, with a heavy emphasis on class participation. Students participate in a simulation of an Arab-Israeli peace negotiation.</td>
<td>POLS*2200, (1.00 credit at the 3000 level in the Comparative Politics and/or International Relations and Global Studies streams)</td>
<td></td>
<td>Department of Political Science</td>
</tr>
<tr>
<td>POLS*4740</td>
<td>Advanced Topics in Rights and Liberties</td>
<td>This course explores rights and liberties from various perspectives depending on the interests of the instructor. Potential topics include exploring the social, political, and legal factors and theories that explain the development of rights and liberties; rights and liberties in a comparative and international context; or the philosophical and policy debates surrounding rights and liberties.</td>
<td>POLS<em>3100 or POLS</em>3210 and at least 1.00 credits at the 3000 level in the Public Policy, Governance, and Law stream.</td>
<td>This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information.</td>
<td>Department of Political Science</td>
</tr>
<tr>
<td>POLS*4760</td>
<td>Advanced Lecture in Comparative Politics</td>
<td>This advanced lecture course examines theories and problems in comparative politics and government in developing and industrialized countries. The geographical and theoretical focus of the course will vary depending on the interests of the instructor.</td>
<td>POLS<em>2080 or POLS</em>2100, (2 of POLS<em>3000, POLS</em>3060, POLS<em>3080, POLS</em>3100, POLS<em>3160, POLS</em>3200, POLS<em>3410, POLS</em>3440, POLS<em>3450, POLS</em>3670, POLS<em>3890, POLS</em>3920)</td>
<td>This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information. Students may not receive credit for both POLS<em>4710 and POLS</em>4760</td>
<td>Department of Political Science</td>
</tr>
<tr>
<td>POLS*4770</td>
<td>Advanced Lecture in International Relations</td>
<td>This advanced lecture course considers theories and problems in the field of International Relations. The theoretical and geographical focus will reflect the interests of the instructor.</td>
<td>POLS<em>2200, (2 of POLS</em>3100, POLS<em>3320, POLS</em>3490, POLS*3790)</td>
<td>This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information. Students may not receive credit for both POLS<em>4710 and POLS</em>4770</td>
<td>Department of Political Science</td>
</tr>
<tr>
<td>POLS*4780</td>
<td>Advanced Lecture in Rights and Liberties</td>
<td>This lecture course explores rights and liberties from various perspectives depending on the interests of the instructor. Potential topics include exploring the political, social, and legal factors and theories that explain the development of rights and liberties; rights and liberties in a comparative and international context; or the philosophical and policy debates surrounding rights and liberties.</td>
<td>POLS<em>2350, (1 of POLS</em>3130, POLS<em>3210, POLS</em>3300, POLS*3140)</td>
<td>This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the departmental website for more information. Students may not receive credit for both POLS<em>4740 and POLS</em>4780</td>
<td>Department of Political Science</td>
</tr>
<tr>
<td>POLS*4900</td>
<td>Special Topics Seminar in Political Science</td>
<td>This seminar-based course explores a current issue in Political Science. Topics will vary from year to year and will reflect the research and teaching interests of the faculty member directing the course. Information on the topic of the current offering can be found on the departmental website.</td>
<td></td>
<td></td>
<td>Department of Political Science</td>
</tr>
</tbody>
</table>
Population Medicine

POPM*3240 Epidemiology F,W (3-0) [0.50]
The course examines the basic concepts of health and disease in populations. Methods used in descriptive and analytic epidemiological studies, including the design, analysis and interpretation of results for observational studies and field trials are presented.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): (BIOL*1080 or BIOL*1090), STAT*2040
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the Department of Population Medicine website for more information.
Department(s): Department of Population Medicine

POPM*4040 Epidemiology of Food-borne Diseases F (3-0) [0.50]
This course examines the epidemiology and prevention of food-borne infections and intoxications, including those of both microbiological and chemical origin. Drawing on outbreak investigations, surveys, risk assessments, government surveillance systems and basic research, the biological, ecological, socio-economic and public health context of these diseases will be discussed.

Prerequisite(s): 1 of FOOD*3230, POPM*3240
Restriction(s): FOOD*4210
Department(s): Department of Population Medicine

POPM*4230 Animal Health F (3-0) [0.50]
This course examines the causes and effects of important diseases of food animals in Canada, with a focus on dairy cattle. Elements of physiology, epidemiology, microbiology, nutrition, and production management are integrated into a health management approach emphasizing disease prevention. The course is directed at senior undergraduate students with interest in and knowledge of, food animal production agriculture.

Offering(s): Offered in DE format every other year starting with F19
Prerequisite(s): ANSC*2340 or ANSC*3080
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods. Please see the Department of Population Medicine website for more information.
Department(s): Department of Population Medicine
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORT*1100</td>
<td>Introductory Portuguese (Brazilian Culture) F (3-0) [0.50]</td>
<td></td>
<td>This course provides the basics of spoken and written Portuguese for students with no previous studies in the language. The learning context will be present-day Brazilian culture. Department(s): School of Languages and Literatures</td>
</tr>
<tr>
<td>PORT*1110</td>
<td>Intermediate Portuguese (Brazilian Culture) W (3-0) [0.50]</td>
<td></td>
<td>This course is a continuation of Introductory Portuguese with emphasis on oral work. The learning context will be present-day Brazilian culture. Prerequisite(s): PORT*1100 Restriction(s): Instructor consent required. Department(s): School of Languages and Literatures</td>
</tr>
</tbody>
</table>
## Psychology

**Department of Psychology**

Psychology majors are encouraged to participate in the on-going research of the department, through independent study courses: PSYC*3240, PSYC*4240, PSYC*4870, and PSYC*4880.

The required number of Psychology credits for the Major is 9.00. Students may choose to take up to an additional 2.00 credits in Psychology. The maximum number of credits at each level is as follows:

<table>
<thead>
<tr>
<th>Level</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>no cap</td>
</tr>
<tr>
<td>2000</td>
<td>3.50 credits</td>
</tr>
<tr>
<td>3000</td>
<td>3.50 credits</td>
</tr>
<tr>
<td>4000</td>
<td>3.00 credits</td>
</tr>
</tbody>
</table>

Students wishing to take a 2000, 3000 or 4000 level course without having completed the appropriate prerequisites must receive permission of the Psychology Academic Advisor and Manager who will determine whether the student has the required background for the course.

**Honours Courses**: Courses designated with (H) are for students in Psychology Honours programs. These include: B.A. Honours Psychology (PSYC, PSYC:C) major or minor, B.A. Information Systems and Human Behaviour (ISHB) major, B.Sc. Psychology: Brain and Cognition (PBC), major or minor, and the Neuroscience (NEUR) major or minor. A cumulative average of at least 70% in all course attempts in Psychology or registration in the ISHB major, NEUR minor, or PBC major or minor is required to enroll in H designated courses.

For courses without semester designations, please check with the department. The remaining courses will normally be offered as indicated. Advance schedules are available in the department.

---

### PSYC*1000 Introduction to Psychology S,F,W (3-0) [0.50]

This is an introduction to the content and methods of psychology. It will cover the major areas such as neuroscience, sensation and perception, learning, cognition, motivation, human development, personality, psychopathology and its treatment, and social psychology.

**Offering(s)**: Also offered through Distance Education format.

**Restriction(s)**: This is a Priority Access Course. Some restrictions may apply during some time periods.

**Department(s)**: Department of Psychology

---

### PSYC*1010 Making Sense of Data in Psychological Research F,W (3-0) [0.50]

This course introduces research designs and quantitative approaches used in psychological science, with an emphasis on conceptual understanding. Specific topics include distributions, meta-analysis, confidence intervals and p-values, effect size, and regression, as well as the differences between descriptive, correlational, and experimental research designs.

**Offering(s)**: Also offered through Distance Education format.

**Prerequisite(s)**: 1 of PSYC*1000, PSYC*1100 , PSYC*1200

**Restriction(s)**: PSYC*2010 , STAT*2040, STAT*2060, STAT*2080, STAT*2090, STAT*2100 , STAT*2120 This is a Priority Access Course. Some restrictions may apply during some time periods.

**Department(s)**: Department of Psychology

---

### PSYC*1500 Foundational Skills for Psychology F,W (3-0) [0.50]

This course is designed to help Psychology majors to optimize their learning in the Psychology program. The primary focus is on individual skill development with respect to academic learning, written and oral communication, career planning, and working in groups. Specific topics will vary by instructor.

**Co-requisite(s)**: 1 of PSYC*1000, PSYC*1100 , PSYC*1200

**Restriction(s)**: Restricted to Psychology majors BAH, BAH:C, BSC:PBC, and Psychology Area of Concentration

**Department(s)**: Department of Psychology

---

### PSYC*2020 Abnormal Psychology W (3-0) [0.50]

This course is an introduction to abnormal psychology including a multidimensional conceptualization of mental health, assessment, diagnosis, and treatment. Common psychological disorders will be explored with respect to etiology, assessment, current diagnosis and classification, as well as treatment. Emphasis will be given to broad empirical research and to the experiences of individuals with these disorders.

**Prerequisite(s)**: PSYC*1000

**Restriction(s)**: PSYC*3390 , This is a Priority Access Course. Some restrictions may apply during some time periods.

**Department(s)**: Department of Psychology

---

### PSYC*2070 Teams, Leadership, and Professional Behaviour F,W (3-0) [0.50]

The course will focus on the theory and practical application of Organizational Psychology with regard to leadership, teams, and professional behaviour. The course will provide students with opportunities to assess their leadership and teamwork skills, as well as active learning activities to practice these skills. Key topics will include work motivation, time management, personal organizational skills, goal setting, conflict management, social influence and stress management.

**Prerequisite(s)**: PSYC*1500 or 4.00 credits in Psychology

**Restriction(s)**: PSYC*3080 , Restricted to Psychology majors BAH, BAH:C, BSC:PBC, and Psychology Area of Concentration

**Department(s)**: Department of Psychology

---

### PSYC*2310 Social Psychology S,F,W (3-0) [0.50]

This course introduces students to the field of social psychology. Major topics introduced will include: social influence, social cognition, attitude, stereotype and prejudice, the self, attraction and interpersonal relationships, group processes and intergroup relations. The course also aims for students to use the knowledge acquired to think critically about how their actions and those of others are influenced by social forces. In addition, the course aims to introduce students to the role of culture in shaping thoughts and behaviour and to provide them an opportunity to appreciate diverse perspectives.

**Offering(s)**: Also offered through Distance Education format.

**Prerequisite(s)**: 1 of PSYC*1000, PSYC*1100 , PSYC*1200

**Department(s)**: Department of Psychology

---

### PSYC*2330 Principles of Learning F (3-0) [0.50]

This course provides a detailed description of principles and concepts of learning and motivation, as well as an introduction to their underlying neurobiological mechanisms. Through the examination of empirical evidence in the fields of Psychology and Behavioural Neuroscience, this course offers a comprehensive description of the role of conditioning in normal and abnormal behaviors.

**Prerequisite(s)**: PSYC*1000

**Restriction(s)**: This is a Priority Access Course. Some restrictions may apply during some time periods.

**Department(s)**: Department of Psychology

---

### PSYC*2360 Psychological Methods and Statistics S,F,W (3-0) [0.50]

This course builds on students’ understanding of basic psychological research methods and statistics, with an emphasis on designing, interpreting, and communicating research. Topics covered throughout the term may include: research ethics, the scientific method, qualitative and quantitative measures, reliability and validity, complex research designs using multiple predictor or independent variables, and the reading and writing of psychological journal articles.

**Offering(s)**: Also offered through Distance Education format.

**Prerequisite(s)**: (1 of PSYC*1000, PSYC*1100 , PSYC*1200 ), (1 of PSYC*1010, PSYC*2010 , STAT*2040)

**Department(s)**: Department of Psychology

---

### PSYC*2390 Sensation and Perception W (3-0) [0.50]

The course objective is to consider the processes of sensory inputs and perception. Approaches ranging from psychophysiology and cognitive psychology to physiology and anatomy will be used. In considering the psychology of sensation and perception, some of the anatomical and physiological aspects of selected senses will be covered in detail and the roles of experience, organization of inputs, and theories of perception are discussed. Topics to be emphasized will vary with the instructor, but may include ontogenetic development, learning, and modification of inputs and their perception. Students will participate in on-line laboratory demonstrations and experiments. (C)

**Offering(s)**: Also offered through Distance Education format.

**Prerequisite(s)**: 1 of PSYC*1000, PSYC*1100 , PSYC*1200

**Restriction(s)**: This is a Priority Access Course. Some restrictions may apply during some time periods.

**Department(s)**: Department of Psychology

---

### PSYC*2410 Behavioural Neuroscience I F (3-0) [0.50]

This course is a general introduction to the structure and function of the nervous system. The physiological basis of sensory (input) systems and the motor (output) system are examined as are central physiological bases of processes such as learning and memory.

**Offering(s)**: Also offered through Distance Education format.

**Prerequisite(s)**: 1 of PSYC*1000, PSYC*1100 , PSYC*1200

**Restriction(s)**: This is a Priority Access Course. Some restrictions may apply during some time periods.

**Department(s)**: Department of Psychology

---

*Last Revision: July 4, 2019*
PSYC*2450 Developmental Psychology F (3-0) [0.50]
This course is an introduction to and an analysis of the major theories of developmental psychology. Emphasis will be placed on the processes of development in the child including physical growth, perception, cognition, personality and interactions with the social environment. The application of developmental psychology to educational and social issues will be discussed.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): 1 of PSYC*1000, PSYC*1100 , PSYC*1200
Restriction(s): FRHD*2270, This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Psychology

PSYC*2650 Cognitive Psychology W (3-0) [0.50]
This course is an introduction to cognitive processes, including topics in the areas of attention, memory, language and reasoning. Students will be exposed to and participate in on-line laboratory demonstrations and experiments.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): 1 of PSYC*1000, PSYC*1100, PSYC*1200
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Psychology

PSYC*2740 Personality W (3-0) [0.50]
This course is a review of the theory, assessment procedures and research findings pertinent to major personality constructs. Personality research, methodology and design will also be covered.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): 1 of PSYC*1000, PSYC*1100, PSYC*1200
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Psychology

PSYC*3000 Historical and Critical Perspectives on Psychology F,W (3-0) [0.50]
The purpose of this course is to help students understand the socio-historical and theoretical context of modern psychological research and practice. This includes: 1) evaluating basic assumptions underlying modern psychology by drawing on historical, theoretical and philosophical perspectives, and 2) investigating historical and current controversies within psychology. Topics may include the question of psychology’s scientific status, the assumptions embedded in psychological theory and research methodology, social constructionism, free will/agency, and the relations between psychology, power, ethics, and politics.

Prerequisite(s): PSYC*2070, PSYC*2360, PSYC*2390, PSYC*2410, PSYC*2650
Restriction(s): Restricted to psychology majors BAH, BAH.C, BSC.BPB, and Psychology area of concentration
Department(s): Department of Psychology

PSYC*3200 Psychology of Law U (3-0) [0.50]
An examination of psychological methods, findings and theories in the study of law. Topics will include the fallibility of the eyewitness; juror decisional processes; credibility of witnesses and attorneys; socialization into legal systems, police behaviour, etc.

Offering(s): Also offered through Distance Education format.
Prerequisite(s): 2.50 credits in Psychology or PSYC*2310
Department(s): Department of Psychology

PSYC*3300 Neurochemical Basis of Behaviour W (3-0) [0.50]
This course analyses how drugs act on various neurochemical systems to regulate motivation and behaviour. Topics of discussion may include psychopathology and its treatment.

Prerequisite(s): 2.50 credits in Psychology including (BIOM*3090 or PSYC*2410)
Department(s): Department of Psychology

PSYC*3310 Evolutionary Psychology F (3-0) [0.50]
Evolutionary Psychology (EP) offers a Darwinian frame of reference for studying questions about human nature. After reviewing basic material on genetics and natural selection, we will examine and criticize the contribution of EP to the understanding of the various aspects of individual and social behaviour, such as altruism, logic, mate selection, health, morality, aesthetics, and the role of culture.

Offering(s): Offered in even-numbered years.
Prerequisite(s): 2.50 credits in Psychology
Department(s): Department of Psychology

PSYC*3110 Topics in Health Psychology W (3-0) [0.50]
This course covers research in health psychology. Possible topics include the interplay of psychosocial factors, behaviour, and physical health; pediatric health psychology; health interventions at the individual, family, group or community levels.

Offering(s): Offered in even-numbered years.
Prerequisite(s): NEUR*2000 or 2.50 credits in Psychology
Department(s): Department of Psychology

PSYC*3240 Independent Research Project S,F,W (0-6) [0.50]
This course provides individual students with hands-on experience conducting a research project. Students are supervised directly by a faculty member as they conduct an in-depth investigation of a specific topic within psychology. Typically, the course involves both the practice and reporting of research. Through this experience students will develop a broader appreciation of the relations between knowledge, theory and research while acquiring basic skills in research methodologies and modes of inquiry. In addition, students will develop their written and oral communication skills (e.g., integration of relevant literature, reporting of research). Course registration requires the signature of the Psychology Academic Coordinator. This signature is contingent upon the student demonstrating they have obtained a faculty supervisor's signature and satisfy the course prerequisites. Please see the Psychology department website for more information.

Prerequisite(s): 2.50 credits in Psychology including PSYC*2360
Equate(s): PSYC*3900
Restriction(s): A minimum grade point average of 75% in Psychology courses.
Instructor consent required.
Department(s): Department of Psychology

PSYC*3250 Psychological Measurement F,W (3-0) [0.50]
This course focuses on training students how to conduct research such that measurement theory guides measure selection and construction. Consequences of measurement theory (reliability/validity) for the accuracy of research findings and interpretation of test scores are also covered. A variety of individual difference variables are examined with an emphasis on how measurement strategies differ depending on the nature of the construct.

Prerequisite(s): PSYC*2360
Restriction(s): Restricted to students in BAH.PSYC, BAH.PSYC:C, BAH.ISHB.
Department(s): Department of Psychology

PSYC*3270 Cognitive Neuroscience F (3-0) [0.50]
This course provides an overview of the neural processes that support cognitive abilities such as attention, perception, memory, emotion, and reasoning. An emphasis is placed on primary research with the goal of revealing the types of methods that cognitive neuroscientists use, and types of questions that they ask, as they try to understand the relationship between our minds and brains.

Prerequisite(s): 1 of NEUR*2000, PSYC*2390, PSYC*2410, PSYC*2650
Restriction(s): PSYC*4600
Department(s): Department of Psychology

PSYC*3280 Minds, Brains & Machines U (3-0) [0.50]
This course will introduce the student to basic issues in cognitive science from philosophical and psychological perspectives. Connectionism, Turing Machines, artificial intelligence, and alternative naturalistic models of the mind will be among the topics explored.

Prerequisite(s): 2.50 credits in Psychology or 3.00 credits in Philosophy
Department(s): Department of Psychology

PSYC*3290 Conducting Statistical Analyses in Psychology F,W (3-1) [0.50]
This course focuses on training students in the quantitative analysis and communications skills needed to become a researcher in psychology. Students conduct a correlation-based meta-analysis to help them concretely understand sampling distributions and the difficulties associated with obtaining study results that replicate. This meta-analytic foundation is then leveraged to teach traditional psychological analysis techniques (e.g., t-test, analysis of variance, and bi-variate/multiple regression) with an emphasis on maximizing factors that increase the probability of study findings that replicate. The value of interpreting results using effect sizes with confidence intervals is discussed and the logic of null-hypothesis testing is briefly reviewed.

Prerequisite(s): 2.50 credits in Psychology including PSYC*2360
Restriction(s): PSYC*2400, STAT*2050.
Department(s): Department of Psychology
PSYC*3300 Psychology of Gender W (3-0) [0.50]
This course will examine the theories and psychological research that deals with the impact of gender upon people's lives and behaviour. Topics will include gender-role socialization and stereotypes; gender-related status and power differentials; and gender differences and dynamics in the physiological, intrapyschic, interpersonal, and socio-cultural domains.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 2.50 credits in Psychology including PSYC*2310
Department(s): Department of Psychology

PSYC*3330 Memory and Attention F (3-0) [0.50]
This course provides an overview of attention and memory: how we prioritize some objects and events over others and how such prior experience influences our subsequent thoughts, feelings and actions. The course will cover what is known about memory and attention from research in the overlapping fields of cognitive psychology, neuropsychology, and cognitive neuroscience.
Prerequisite(s): 2.50 credits in Psychology including PSYC*2650
Department(s): Department of Psychology

PSYC*3350 Cross-Cultural Psychology F (3-0) [0.50]
This course provides an examination of cultural differences from the perspective of psychology, and of individual and group relations within and between culturally diverse societies. The primary goal of this course is to provide a framework and knowledge base with which to understand the various contexts, processes and outcomes of intercultural contact.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 2.50 credits in Psychology including PSYC*2310
Department(s): Department of Psychology

PSYC*3410 Behavioural Neuroscience II W (3-2) [0.50]
This course will focus on contemporary research and theory related to such selected topics as physiological correlates of memory, learning, motivation, emotion, stress, sensory and motor functions. Both the central and peripheral components of the nervous system will be examined in relation to the above.
Prerequisite(s): NEUR*2000 or PSYC*2410
Restriction(s): Restricted to students in Neuroscience (major or Minor). This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Psychology

PSYC*3450 Social and Personality Development W (3-0) [0.50]
This course is an examination of research, methodological issues and theories concerning personality-social development. Topics may include temperament, imitation, parent-child interaction, and the development of attachments, sex-roles, morality, aggression and pro-social behaviour.
Prerequisite(s): 2.50 credits in Psychology including (FRHD*2270 or PSYC*2450)
Restriction(s): This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Psychology

PSYC*3470 Putting Psychology to Work W (3-0) [0.50]
This course provides students with the opportunity to prepare for the transition to post-graduate programs and work. This course covers topics related to industrial psychology from individual and organizational perspectives. Topics include: the history of work and industrial psychology, career management, job analysis, recruitment, selection, employment law, compensation and benefits, performance appraisal, training and development as well as succession planning.
Prerequisite(s): PSYC*2070, PSYC*2360, (2 of PSYC*2020, PSYC*2310, PSYC*2450, PSYC*2740), (1 of PSYC*2330, PSYC*2390, PSYC*2410, PSYC*2650)
Restriction(s): PSYC*3070, Restricted to psychology majors BAH, BAH:C, and Psychology area of concentration. This is a Priority Access Course. (BAG Psychology area of concentration)
Department(s): Department of Psychology

PSYC*3480 Psychology of Sport U (3-0) [0.50]
This course provides an examination of individual and group behaviour in physical activities and sports. Emphasis will be placed on understanding psychological concepts which are pertinent to sports, e.g., motivation, social and personality development, cognition, leadership and group dynamics.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): PSYC*2310 or PSYC*2740
Department(s): Department of Psychology

PSYC*3490 Social and Organizational Psychology F (3-0) [0.50]
A number of applied issues will be examined from a social and organizational psychological perspective. The topics will include health and well-being; attributions and person perception; intergroup relations and prejudice; and social influence. Students will learn how to apply psychological theories and research to understand and ameliorate applied issues.
Prerequisite(s): 3.00 credits in Psychology including PSYC*2070, PSYC*2310
Restriction(s): PSYC*3080, This is a Priority Access Course. For Psychology majors BAH, BAH:C, BSC: PBC, and Psychology area of concentration
Department(s): Department of Psychology

PSYC*3570 The Psychology of Death and Dying U (3-0) [0.50]
An examination of theory, research, and issues in the psychology of death and dying. Emphasis is upon the cognitive operations used to process information about death and the influence of death constructs in daily life. Topics include the development of death concepts throughout the life-span, death anxiety in society, the needs of the dying person, the psychology of grieving, and unexpected losses such as deaths by suicide or miscarriage.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 1 of FRHD*2270, PSYC*2310, PSYC*2740, PSYC*2450
Department(s): Department of Psychology

PSYC*3800 Psychology and Education U (3-0) [0.50]
The application of psychological principles and techniques to the study of the educational process.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): 1 of FRHD*2270, PSYC*1000, PSYC*1100, PSYC*1200
Department(s): Department of Psychology

PSYC*3850 Intellectual Disabilities U (3-0) [0.50]
This course covers applied and theoretical aspects of intellectual disabilities, and lays a foundation for work in the area of intellectual disabilities.
Offering(s): Offered through Distance Education format only.
Prerequisite(s): FRHD*2270 or PSYC*2450
Department(s): Department of Psychology

PSYC*3910 Psychology Externship F,W,S (0-6) [0.50]
An independent program of study formally integrating the student's academic study with one or more work experiences, to be decided by the student in consultation with the supervisory faculty (normally the department's co-op coordinator) prior to registration in the course. In order to qualify for this course, the student must be employed in a work setting at the time of registration to help ensure that a suitable project is feasible in the context of a work placement or employment. The department is not responsible for obtaining employment. The course project is aimed at making a significant contribution to the work setting. The student must consult with the supervisory faculty before selecting or registering for the course. (Enrolment is limited. Not open to co-op students.)
Prerequisite(s): PSYC*2070, PSYC*2360, (2 of PSYC*2020, PSYC*2310, PSYC*2450, PSYC*2740), (1 of PSYC*2330, PSYC*2390, PSYC*2410, PSYC*2650)
Restriction(s): Restricted to Psychology majors BAH, BAH:C, and Psychology area of concentration. Instructor consent required.
Department(s): Department of Psychology

PSYC*4240 Advanced Independent Research Project S,F,W (3-6) [0.50]
This course provides individual students with hands-on experience conducting a research project. Students are supervised directly by a faculty member as they conduct an in-depth investigation of a specific topic within psychology. Typically, the course involves both the practice and reporting of research. Students will apply the research and communication skills they have acquired through prior coursework in order to work more independently. Course registration requires the signature of the Psychology Academic Manager. This signature is contingent upon the student demonstrating they have obtained a faculty supervisor's signature and satisfy the course prerequisites. Please see the Psychology department website for more information. [https://www.guelphph.ca/psychology/]
Prerequisite(s): 14.00 credits including ([ PSYC*2040 or PSYC*3290 )], 1.00 credits in Psychology at the 3000 level]
Restriction(s): PSYC*4500, PSYC*4510 Restricted to students in BAH.PSYC. BAH.PSYC.C, BAH.ISHB, BSCH.PBC or a major or minor in Neurosciences with a minimum grade point average of 75% in all Psychology course attempts. Instructor consent required.
Department(s): Department of Psychology
PSYC*4310 Advanced Topics in Social and Applied Social Psychology W (3-0) [0.50]
This is an in-depth examination of specific advances in social psychological research, theory, and/or applications. Selected topic areas may include the psychology of social groups, women’s health and well-being, and community interventions. Specific topics, to be announced prior to course selection, will vary according to the interests of the instructor of the course.
Prerequisite(s): 14.00 credits including [PSYC*2310, PSYC*3250, (PSYC*2040 or PSYC*3290), 0.50 credits in Psychology at the 3000 level]
Restriction(s): Restricted to students in BAH.PSYC, BAH.PSYC:C, BAH.ISHB, BSCH.PBC, or a major or minor in Neuroscience with a minimum grade point average of 70% in all Psychology course attempts. This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Psychology

PSYC*4330 Industrial/Organizational Psychology F (3-0) [0.50]
Students will examine theoretical and methodological issues in selected topic areas of industrial/organizational psychology. Selected topic areas may include diversity issues, trust and justice, job performance, employment selection, and stress and well-being. Specific topics, to be announced prior to course selection, will vary according to the interests of the instructor of the course.
Prerequisite(s): 14.00 credits including [PSYC*3250, (1 of PSYC*2070, PSYC*3070, PSYC*3080, PSYC*3490), (PSYC*2040 or PSYC*3290), 0.50 credits in Psychology at the 3000 level]
Restriction(s): Restricted to students in BAH.PSYC, BAH.PSYC:C, BAH.ISHB, BSCH.PBC, or a major or minor in Neuroscience with a minimum grade point average of 70% in all Psychology course attempts. This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Psychology

PSYC*4460 Advanced Topics in Clinical and Applied Developmental Psychology W (3-0) [0.50]
This course covers issues and theories in clinical or applied developmental psychology. Topics may include pediatric (child health) psychology, attachment relationships, non-suicidal self-injury, and aggression. The selected topic, to be announced prior to course selection, will vary on the basis of the expertise of the instructor.
Prerequisite(s): 14.00 credits including [PSYC*3250, (PSYC*2040 or PSYC*3390, PSYC*2450 or PSYC*2740), (PSYC*2040 or PSYC*3290), 0.50 credits in Psychology at the 3000 level]
Restriction(s): Restricted to students in BAH.PSYC, BAH.PSYC:C, BAH.ISHB, BSCH.PBC, or a major or minor in Neuroscience with a minimum grade point average of 70% in all Psychology course attempts. This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Psychology

PSYC*4470 Advanced Topics in Behavioural and Cognitive Neuroscience F (3-0) [0.50]
Major areas of contemporary behavioural or cognitive neuroscience will be covered in a seminar format. Selected topic areas may include the neural basis of learning, memory, attention, sensation, and perception. The selected topic, to be announced prior to course selection, will vary on the basis of the expertise of the instructor.
Prerequisite(s): PSYC*3270, (NEUR*2000 or PSYC*2410)
Restriction(s): Restricted to students in BAH.PSYC, BAH.PSYC:C, BAH.ISHB, BSCH.PBC, BSCH.NEUR, or a major or minor in Neuroscience with a minimum grade point average of 70% in all Psychology course attempts. and a minimum of 14.00 completed credits. This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): Department of Psychology

PSYC*4540 Practical Applications of Psychology F,W (3-0) [1.00]
This is a required capstone course for students in Psychology’s BA and BSC Honours major programs, excepting those who are taking the Honours Thesis courses (PSYC*4780 or 4880). The course adopts a problem-based learning approach in which students will be presented with problems resembling those that they will face in their professional and personal lives. Students will apply their psychological knowledge and skills to analyze the problem, consider solutions, and communicate recommendations to hypothetical stakeholders.
Prerequisite(s): 14.00 credits including [PSYC*3250, (PSYC*3000 or 7.50 credits in Psychology), (PSYC*2040 or PSYC*3290)]
Restriction(s): PSYC*4870, PSYC*4880. Restricted to students in BAH.PSYC, BAH.PSYC:C, BAH.ISHB, BSCH.PBC or a major or minor in Neurosciences with a minimum grade point average of 70% in all Psychology course attempts.
Department(s): Department of Psychology

PSYC*4570 Special Topics in Applied Psychology U (3-0) [0.50]
This is an in-depth examination of specific advances in the application of psychology theory and methods. Specific topics will vary according to the expertise of the instructor.
Prerequisite(s): 14.00 credits including [PSYC*3250, (PSYC*2040 or PSYC*3290), 0.50 credits in Psychology at the 3000 level]
Restriction(s): Restricted to students in BAH.PSYC, BAH.PSYC:C, BAH.ISHB, BSCH.PBC or a major or minor in Neurosciences with a minimum grade point average of 70% in all Psychology course attempts.
Department(s): Department of Psychology

PSYC*4580 Special Topics in Behavioural Sciences U (3-0) [0.50]
This course provides an in-depth examination of specific theoretical and methodological advances for understanding human and/or animal behaviour. Specific topics will vary according to the expertise of the instructor, but could include advances in Social Psychology, Industrial/Organizational Psychology, Cognitive or Behavioural Neuroscience.
Prerequisite(s): 14.00 credits including [PSYC*2040 or PSYC*3290], 1.00 credits in Psychology at the 3000 level
Restriction(s): Restricted to students in BAH.PSYC, BAH.PSYC:C, BAH.ISHB, BSCH.PBC, or a major or minor in Neurosciences with a minimum grade point average of 70% in all Psychology course attempts.
Department(s): Department of Psychology

PSYC*4750 Seminar in Motivation and Emotion W (3-0) [0.50]
This course provides an in-depth examination of human motivation and emotion—the neurocognitive mechanisms and corresponding subjective feelings that focus thoughts and behaviours in an adaptive way toward some objects and events in the environment and away from others. The course material and assignments will cover what is known about motivation and emotion from research in the overlapping fields of cognitive and social psychology, emotion theory, and cognitive-affective neuroscience.
Prerequisite(s): 14.00 credits including 1.50 credits in Psychology at the 3000 level
Restriction(s): Restricted to students in BAH.PSYC, BAH.PSYC:C, BAH.ISHB, BSCH.PBC, or a major or minor in Neuroscience with a minimum grade point average of 70% in all Psychology course attempts.
Department(s): Department of Psychology

PSYC*4780 Advanced Research Methods and Statistics F (3-0) [0.50]
As a companion to honours thesis, this course focuses on advanced research methods, including qualitative methods, and statistical techniques, and presenting research in oral and written form. Topics of emphasis will be internal validity, ecological validity, and construct validity, as well as the correspondence between complex designs and the statistical techniques that can be used to analyze the data resulting from such designs. In addition to readings, lectures, and in-class exercises, students will be guided through the process of analyzing qualitative data and reporting on an empirical investigation in oral and written form.
Prerequisite(s): 14.00 credits including PSYC*3250, (1 of PSYC*2040 or PSYC*3290 or STAT*2050)
Restriction(s): PSYC*3370, PSYC*3380. Restricted to students in BAH.PSYC, BAH.PSYC:C, BAH.ISHB, BSCH.PBC, or a major or minor in Neuroscience. with a minimum cumulative average of 70% in all Psychology course attempts. Instructors consent required.
Department(s): Department of Psychology

PSYC*4870 Honours Thesis I S,F,W (3-0) [0.50]
Under individual faculty supervision, students plan, develop, and write a research proposal and prepare an extensive review paper on their area of research. Group sessions are held on research ethics, subject protocols and computer data handling techniques. This course will be graded on a Pass/Fail basis. Note that enrolment in this course is limited and a minimum grade point average of 70% in all Psychology course attempts. and a minimum of 14.00 completed credits. This is a Priority Access Course. Some restrictions may apply during some time periods.
Prerequisite(s): 14.00 credits including PSYC*3250, (PSYC*2040 or PSYC*3290) or STAT*2050
Restriction(s): Restricted to students in BAH.PSYC, BAH.PSYC:C, BAH.ISHB, BSCH.PBC, or a major or minor in Neuroscience. with a minimum cumulative average of 70% in all Psychology course attempts. Instructors consent required.
Department(s): Department of Psychology
<table>
<thead>
<tr>
<th>Course Code:</th>
<th>PSYC*4880 Honours Thesis II S,F,W (3-10) [1.00]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>This course is a continuation of PSYC*4870. Students conduct research and write an undergraduate thesis under the direction of a faculty member.</td>
</tr>
</tbody>
</table>

**Prerequisite(s):** PSYC*4870

**Restriction(s):** PSYC*4540. Restricted to students in BAH.PSYC, BAH.PSYC.C, BAH.ISHB, BSCH.PBC or a major or minor in Neurosciences with a minimum grade point average of 75% in all Psychology course attempts. Instructor consent required.

**Department(s):** Department of Psychology
### Real Estate and Housing

**Gordon S. Lang School of Business and Economics, Department of Marketing and Consumer Studies.**

**REAL*1820 Real Estate and Housing F (3-0) [0.50]**

This survey course acquaints students with the theories, practices and principles of real estate and housing. Topics include how real estate assets and markets differ from other assets, government involvement in the housing and real estate sectors, non-market housing in Canada, financing real estate, and development.

**Equate(s):** COST*1820, MCS*1820

**Restriction(s):** This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Marketing and Consumer Studies

**REAL*2820 Real Estate Finance W (3-0) [0.50]**

This course examines the financing of both residential and commercial investment real estate. A mathematical approach is used to examine the impact of various lender and borrower decisions about loan terms (amortization periods, pre-payment options, etc.). The evolution of the Canadian housing finance system is contrasted with that in the United States. New methods of financing real estate other than traditional mortgages are discussed.

**Prerequisite(s):** 5.00 credits

**Equate(s):** COST*2820, MCS*2820

**Restriction(s):** This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Marketing and Consumer Studies

**REAL*2850 Service Learning in Housing F (3-0) [0.50]**

This course provides an introduction to ethics and social issues as they apply to the housing and real estate industries. Students will be required to participate in a 10-15 hour service learning exercise where they volunteer for a frontline housing agency/provider. They will then share their experiences with their classmates during the final week of classes.

**Prerequisite(s):** 4.00 credits

**Equate(s):** COST*2850, MCS*2850

**Restriction(s):** This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Marketing and Consumer Studies

**REAL*3810 Real Estate Market Analysis F (3-0) [0.50]**

In this course students examine the processes used to analyze supply and demand in the real estate market. The course focuses on using research methodologies to define the scope of analysis; identify data needs; collect information from various sources, including on-line resources; and interpret the results. Applications to different property types are discussed. Current market trends are also examined. As well, the course deals with marketing real estate: listing procedures, advertising, negotiating.

**Prerequisite(s):** (MC*1820 or REAL*1820), (ECON*2740 or STAT*2060)

**Restriction(s):** This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Marketing and Consumer Studies

**REAL*3870 Topics in Housing U (3-0) [0.50]**

Lecture-discussion or seminar on a selected topic or area of specialization related to housing to be conducted by faculty with special interests or expertise in the area. Students should confirm with the department prior to course selection what topic(s), if any, will be offered during specific semesters.

**Prerequisite(s):** Will be indicated by the department when the course is offered.

**Equate(s):** COST*3870, MCS*3870

**Restriction(s):** Instructor consent required.

**Department(s):** Department of Marketing and Consumer Studies

**REAL*3880 Topics in Housing U (3-0) [0.50]**

Lecture-discussion or seminar on a selected topic or area of specialization related to housing to be conducted by faculty with special interests or expertise in the area. Students should confirm with the department prior to course selection what topic(s), if any, will be offered during specific semesters.

**Prerequisite(s):** Will be indicated by the department when the course is offered.

**Equate(s):** COST*3880, MCS*3880

**Restriction(s):** Instructor consent required.

**Department(s):** Department of Marketing and Consumer Studies

**REAL*3890 Property Management W (3-0) [0.50]**

Financial theory is used to examine the diversification benefits of including real estate with financial assets in an investment portfolio. Diversification strategies within a real estate portfolio are also covered. The marketing and leasing of real estate space culminates in a leasing negotiation exercise between pairs of students. Differing property management issues faced by managers of residential, office, retail, industrial and mixed use properties are covered.

**Prerequisite(s):** (1 of COST*1800, REAL*1820, MCS*1820), (1 of ACCT*2230, BUS*2230, ECON*3560, HTM*3070, MCS*2820, REAL*2820)

**Equate(s):** COST*3890, MCS*3890

**Restriction(s):** This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Marketing and Consumer Studies

**REAL*4820 Real Estate Appraisal F (3-0) [0.50]**

This course deals with the basic principles involved in valuing real estate. The market comparison, cost and income approaches of appraisal are covered. The major emphasis in the course is on using discounted cash flow projections to value income-producing real estate. The term project involves the use of a spreadsheet program to estimate property value for a property chosen by the student. While valuation of single family homes is covered, the main emphasis is on investment real estate.

**Prerequisite(s):** (1 of CIS*1200, CIS*1500, MCS*2020), (1 of ACCT*2230, BUS*2230, ECON*2560, ECON*3560, MCS*2820, REAL*2820)

**Equate(s):** MCS*4820

**Restriction(s):** This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Marketing and Consumer Studies

**REAL*4830 Real Estate Development Project W (6-0) [1.00]**

This is a capstone course covering the real estate development process and bringing together concepts from all other Real Estate and Housing courses. It deals with the development, redevelopment and renewal of real estate and housing services. Students will complete a phased project that considers all aspects of development feasibility including market analysis, physical constraints, financial viability and government regulation.

**Prerequisite(s):** 15.00 credits including REAL*3810, REAL*4820

**Equate(s):** MCS*3820, MCS*4810. This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Marketing and Consumer Studies

**REAL*4840 Housing and Real Estate Law F (3-0) [0.50]**

This course lays out the legal principles which guide the expanding and changing body of law dealing with housing and real estate development and forms of occupancy; statutory and regulatory matters are explored.

**Prerequisite(s):** 9.00 credits including MCS*1000, (1 of COST*1800, MCS*1820, REAL*1820), (MCS*2820 or REAL*2820)

**Equate(s):** MCS*4840

**Restriction(s):** This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Marketing and Consumer Studies

**REAL*4870 Sustainable Real Estate F (3-0) [0.50]**

This course is designed to give students an understanding of how topics in sustainability and climate change affect and are affected by real estate and urban economics. Students will develop an understanding of the reasons for and benefits of sustainability practices in real estate and planning.

**Prerequisite(s):** 14.00 credits

**Restriction(s):** This is a Priority Access Course. Some restrictions may apply during some time periods. Please contact the department for more information.

**Department(s):** Department of Marketing and Consumer Studies
Sociology

Department of Sociology and Anthropology

The Department of Sociology and Anthropology offers three types of courses: sociology courses with the prefix SOC*; anthropology courses with the prefix ANTH*; and departmental courses with the prefix SOAN*.

Courses will normally be offered in the semesters designated. For information on other semesters these courses will be offered and the semesters those courses without designations will be offered, please check with the department. In addition to regularly scheduled courses, students may elect to do independent study. A student who wishes to do a reading course should first consult the professor with whom he/she wishes to work. Please note: a student is allowed a total of 1.00 credits only for reading courses.

SOAN*2112, SOAN*2120

This is a Priority Access Course. Enrolment may be restricted to courses that are available.

Please note: the availability of third and fourth year seminar courses will vary. Students must check with the Department of Sociology and Anthropology to see when seminar courses are available.

SOAN*2112 Sociology S,F,W (3-0) [0.50]

An introductory course dealing with the basic concepts and methods of sociology applied to societies, groups and individuals. Students will gain an understanding of basic social processes such as socialization, social exchange, deviance and conformity, social change and basic social institutions such as the economy, the polity, the family, religion, education.

Offering(s): Also offered through Distance Education format.

Department(s): Department of Sociology and Anthropology

SOAN*1500 Crime and Criminal Justice F,W (3-0) [0.50]

This course will introduce students to the study of crime and criminal justice. It will examine the various criminological theories, types of criminal behaviour, and the criminal justice system.

Department(s): Department of Sociology and Anthropology

SOC*2010 Canadian Society U (3-0) [0.50]

A description of the structure of Canadian society with its social, political and economic tensions.

Prerequisite(s): SOC*1100

Department(s): Department of Sociology and Anthropology

SOC*2070 Social Deviance S,F,W (3-0) [0.50]

An introduction to some of the basic theories of deviance and social control and their application to selected social problems.

Offering(s): Also offered through Distance Education format.

Prerequisite(s): SOC*1100 or SOC*1500

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. Please see the departmental website.

Department(s): Department of Sociology and Anthropology

SOC*2080 Rural Sociology W (3-0) [0.50]

An introduction to the structure and processes of rural society. This course deals with diverse topics such as agrarian movements, the rise of the agro-industrial complex, the role of the state in agriculture, the question of community, and rural environmental issues. A comparative perspective is cultivated, although the primary emphasis is on Canadian society.

Prerequisite(s): 1 of ANTH*1150, IDEV*1000, GEOG*1220, SOC*1100

Department(s): Department of Sociology and Anthropology

SOC*2280 Society and Environment F (3-0) [0.50]

An introduction to the nature and dimensions of the environmental crisis. The values, interests and social institutions (including government and industry) that promote pollution or environmentalism will be considered. Issues to be examined may include global warming, nuclear energy, environmental toxics, species extinction and population growth pressures.

Prerequisite(s): 1 of ANTH*1150, GEOG*1220, IDEV*1000, SOC*1100

Department(s): Department of Sociology and Anthropology

SOC*2390 Class and Stratification U (3-0) [0.50]

An examination of the persistent bases of social inequalities such as wealth, income, power and prestige including class formation, class consciousness, political activity and social mobility.

Prerequisite(s): SOC*1100

Department(s): Department of Sociology and Anthropology

SOC*2700 Criminological Theory F,W (3-0) [0.50]

This course will examine the development of criminological theory from the late 1700s to contemporary times.

Prerequisite(s): SOC*1500

Department(s): Department of Sociology and Anthropology

SOC*2760 Homicide S,F,W (3-0) [0.50]

This course will review legal definitions of homicide, statistical trends in homicide—both in Canada and internationally—and theoretical explanations of homicide. The course will also examine the key criminological/sociological empirical research studies on the various types of homicide, such as: femicide, familialicide, serial and mass murder.

Offering(s): Offered through Distance Education format only.

Prerequisite(s): 1 of ANTH*1150, FRHD*1010, PHIL*1010, POLS*1400, PSYC*1000, PSYC*1100, PSYC*1200, SOC*1100, SOC*1500

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. Please see the departmental website for more information.

Department(s): Department of Sociology and Anthropology

SOC*3040 Sociology of Social Welfare W (3-0) [0.50]

This course examines the major factors that shape the welfare state and considers what impact welfare policies have on people. Central to the discussion is welfare in Canada and what changes are desirable and feasible.

Offering(s): Offered in odd-numbered years.

Prerequisite(s): SOAN*2112, SOAN*2120

Department(s): Department of Sociology and Anthropology

SOC*3130 Politics and Society U (3-0) [0.50]

An interpretation of the political process and its relationship to other aspects of the social structure, including such topics as political parties, movements, factions, citizen participation, power structures and the process of political exchange.

Prerequisite(s): SOAN*2112, SOAN*2120

Department(s): Department of Sociology and Anthropology

SOC*3310 Contemporary Theory F (3-0) [0.50]

This course outlines and evaluates the major theories in use today. A central aspect of the course is instruction in the application of these theories.

Prerequisite(s): SOAN*2112, SOAN*2120

Department(s): Department of Sociology and Anthropology

SOC*3380 Society and Nature W (3-0) [0.50]

The course provides a range of worldviews which address the relations between society and the environment. Material in the course will include historical perspectives and contemporary perspective, thereby allowing students to understand that worldviews concerning this crucial relation are dynamic, changing and reflect the diverse, and sometimes competing, perspectives of a society within particular moments of history.

Prerequisite(s): GEOG*2210 or SOC*2280

Department(s): Department of Sociology and Anthropology

SOC*3410 Individual and Society W (3-0) [0.50]

This course deals with the relationship between the individual and society through close examination of social interaction in a variety of settings. Students will be exposed to a range of theories, methods and concepts from cognitive, micro, dramaturgical, and interpretive sociologies, and will learn to apply these to the analysis of personal relationships, intercultural encounters, institutional life, collective action, and everyday life-worlds.

Prerequisite(s): SOAN*2112, SOAN*2120

Department(s): Department of Sociology and Anthropology

SOC*3490 Law and Society W (3-0) [0.50]

This course examines the social basis of law. Specific topics include the law as an instrument of stability or change, and the role of law makers, law enforcers and interpreters, including the legal profession, the police, judges and courts.

Prerequisite(s): (SOAN*2112 or SOC*2700), SOAN*2120

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. Please see the departmental website.

Department(s): Department of Sociology and Anthropology

Last Revision: July 4, 2019
SOC*3710 Youth Justice F,W (3-0) [0.50]  
This course examines concerns about youth crime in Canada and elsewhere. It examines the history of legislation to control youth crime, criminal justice processing and practices, public reactions and concerns about youth crime and theoretical models used to explain youth crime.  
Prerequisite(s): (SOAN*2112 or SOC*2700), SOAN*2120  
Restriction(s): Registration in Anthropology, Criminal Justice & Public Policy or Sociology (major, minor or area of concentration).  
Department(s): Department of Sociology and Anthropology

SOC*3730 Courts and Society W (3-0) [0.50]  
This course is an introduction to the social processes involved in the court, particularly the criminal court. Typical concerns will be the place of courts in society, public opinion and confidence in courts, purposes and principles of sentencing, sentencing reforms and disparities (e.g., across gender and race), the role of criminal records, jury, the roles of judges, and alternatives to criminal courts.  
Prerequisite(s): (SOAN*2112 or SOC*2700), SOAN*2120  
Restriction(s): Registration in Anthropology, Criminal Justice & Public Policy or Sociology (major, minor or area of concentration).  
Department(s): Department of Sociology and Anthropology

SOC*3740 Corrections and Penology F (3-0) [0.50]  
This course will examine the current state of knowledge regarding the role of corrections and penology. It will examine such specific issues as public perception and reaction to the criminal justice system's methods of punishment and treatment of criminal offenders, the effectiveness of sentencing options and policies, including fines, probation, prison sentences and parole. It will also examine the various theoretical and methodological approaches to the study of courts, corrections and penology.  
Prerequisite(s): (SOAN*2112 or SOC*2700), SOAN*2120  
Restriction(s): Registration in Anthropology, Criminal Justice & Public Policy or Sociology (major, minor or area of concentration).  
Department(s): Department of Sociology and Anthropology

SOC*3750 Police in Society F,W (3-0) [0.50]  
This course will examine the role of police in society. It will examine theories of policing, the history of policing and such issues as police citizen interaction, relations with visible minorities, methods for controlling police behaviour, and the effectiveness of the police in carrying out specific policy directives.  
Prerequisite(s): (SOAN*2112 or SOC*2700), SOAN*2120  
Restriction(s): Registration in Anthropology, Criminal Justice & Public Policy or Sociology (major, minor or area of concentration).  
Department(s): Department of Sociology and Anthropology

SOC*3840 Seminar in Sociology F,W (3-0) [0.50]  
This course will be offered as a structured seminar on various topics depending upon the interests of the faculty member teaching the course. Topics will be announced and course outlines will be available at course selection. The availability of third and fourth year seminar courses will vary. Students must check with the Department of Sociology and Anthropology to see when seminar courses are available.  
Prerequisite(s): 10.00 credits including (1 of SOAN*2112, SOC*2080, SOC*2700), SOAN*2120  
Restriction(s): Registration in Anthropology, Criminal Justice & Public Policy or Sociology (major, minor or area of concentration).  
Department(s): Department of Sociology and Anthropology

SOC*3850 Seminar in Sociology F,W (3-0) [0.50]  
This course will be offered as a structured seminar on various topics depending upon the interests of the faculty member teaching the course. Topics will be announced and course outlines will be available at course selection. The availability of third and fourth year seminar courses will vary. Students must check with the Department of Sociology and Anthropology to see when seminar courses are available.  
Prerequisite(s): 10.00 credits including (1 of SOAN*2112, SOC*2080, SOC*2700), SOAN*2120  
Restriction(s): Registration in Anthropology, Criminal Justice & Public Policy or Sociology (major, minor or area of concentration).  
Department(s): Department of Sociology and Anthropology

SOC*3950 Special Projects in Sociology S,F,W (3-0) [0.50]  
This special study option/reading course is designed to provide advanced undergraduates with an opportunity to explore independently the frontiers and foundations of a field of knowledge. Under supervision, the student will study in greater depth topics related to regular upper-level courses offered in the department which the student has taken or is taking. Permission of the instructor who will be supervising the study is required.  
Prerequisite(s): 10.00 credits  
Restriction(s): Instructor consent required. Please note, a student is allowed a total of 1.00 credits only for reading courses.  
Department(s): Department of Sociology and Anthropology

SOC*4010 Violence and Society F,W (3-0) [0.50]  
This course will focus on the changing nature of violence in our society by critically evaluating theory, research and public policy on the causes and control of violence. The links among structural, institutional and interpersonal violence will be examined as well as the social construction of violence, particularly why some forms of violence are considered to be more serious social problems than others.  
Prerequisite(s): 14.00 credits including (SOC*2700 or SOC*3310), (SOCAN*3120 or POLS*3650)  
Restriction(s): Restricted to students in BAH:CJPP and BAH:SOC with an average of 70% in all course attempts in Political Science, Sociology and Anthropology courses  
Department(s): Department of Sociology and Anthropology

SOC*4030 Advanced Topics in Criminology F (3-0) [0.50]  
This is an in-depth study of selected issues in criminology.  
Prerequisite(s): 14.00 credits including (2 of SOC*3490, SOC*3710, SOC*3730, SOC*3740, SOC*3750), (1 of ANTH*3690, SOC*2700, SOC*3310), (SOCAN*3120 or POLS*3650)  
Restriction(s): Restricted to students in BAH:CJPP with an average of 70% in all course attempts in Political Science, Sociology and Anthropology and Anthropology courses  
Department(s): Department of Sociology and Anthropology

SOC*4200 Advanced Topics in Criminal Justice W (3-0) [0.50]  
This is an in-depth study of issues in criminal justice.  
Prerequisite(s): 14.00 credits including (2 of SOC*3490, SOC*3710, SOC*3730, SOC*3740, SOC*3750), (1 of ANTH*3690, SOC*2700, SOC*3310), (SOCAN*3120 or POLS*3650)  
Restriction(s): Restricted to students in BAH:CJPP with an average of 70% in all course attempts in Political Science, Sociology and Anthropology and Anthropology courses  
Department(s): Department of Sociology and Anthropology

SOC*4230 Comparative Sociology W (3-0) [0.50]  
Societies and social institutions in cross-cultural perspectives. The focus of this course will vary but in every instance will explicitly involve cross-cultural comparisons.  
Offering(s): Offered in even-numbered years.  
Prerequisite(s): 12.50 credits including SOAN*2120, SOC*2080  
Department(s): Department of Sociology and Anthropology

SOC*4300 Theoretical and Methodological Issues U (3-0) [0.50]  
This course will provide an opportunity for sociology majors to consider in detail the integration of theoretical and methodological issues at an advanced level. It is meant to engage students in the latest developments in a particular area of the discipline. Course topics will be announced and course outlines will be available at course selection time. This course is highly recommended to students who are considering graduate work in sociology.  
Prerequisite(s): 14.00 credits including SOAN*3070, SOAN*3120, SOC*3310  
Department(s): Department of Sociology and Anthropology

SOC*4410 Women, Work and Public Policy F,W (3-0) [0.50]  
In this course students will critically assess the transformation of women’s work in contemporary society. A range of topics pertaining to women’s work will be explored with particular attention paid to the processes through which class, gender, race, ethnicity, and age shape divisions of work. The course will also focus on theories that have attempted to explain the transformation of women’s work.  
Prerequisite(s): 12.50 credits including (1 of ANTH*2160, SOAN*2112, SOC*2700), SOAN*2120  
Department(s): Department of Sociology and Anthropology

SOC*4420 Sociology of Food F (3-0) [0.50]  
This course is directed towards upper level students in sociology and related disciplines who wish to consider the variety of contentious issues surrounding food in the contemporary world. The course will encourage a sociological approach to food systems that is both historically informed and comparative in scope.  
Prerequisite(s): 12.50 credits including (1 of ANTH*2160, IDEV*2300, SOAN*2112), SOC*2080, IDEV*2100, SOAN*2120  
Department(s): Department of Sociology and Anthropology
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC*4430</td>
<td>Alternative Social Possibilities W (3-0) [0.50]</td>
<td></td>
<td>This course uses the full range of sociological theory to suggest what alternative ways</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>of organizing society might be possible. Students will examine different accounts of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>theories of why outcomes are not equal from functionalist theories of stratification to</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>theories of class domination and exploitation to economic market accounts to feminist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>accounts based on patriarchy. This course will allow students to bring together for</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>themselves a wide range of theories used in other courses and apply them to how their</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>own ideals might be implemented.</td>
</tr>
<tr>
<td></td>
<td>Pre requisite(s):</td>
<td>12.50</td>
<td>credits including (1 of ANTH<em>3690, SOC</em>2700, SOC*3310),</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1 of POLS<em>2650, POLS</em>3180 , SOAN*2120)</td>
</tr>
<tr>
<td></td>
<td>Department(s):</td>
<td></td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>SOC*4740</td>
<td>Seminar in Sociology F,W (3-0) [0.50]</td>
<td></td>
<td>This course will be offered as a structured seminar on various topics depending upon the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>interests of the faculty member teaching the course. Topics will be announced and course</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>outlines will be available at course selection. The availability of third and fourth year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>seminar courses will vary. Students must check with the Department of Sociology and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Anthropology to see when seminar courses are available.</td>
</tr>
<tr>
<td></td>
<td>Pre requisite(s):</td>
<td>12.50</td>
<td>credits including SOC<em>3310, SOAN</em>3070, SOAN*3120</td>
</tr>
<tr>
<td></td>
<td>Department(s):</td>
<td></td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>SOC*4840</td>
<td>Seminar in Sociology F,W (3-0) [0.50]</td>
<td></td>
<td>This course will be offered as a structured seminar on various topics depending upon the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>interests of the faculty member teaching the course. Topics will be announced and course</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>outlines will be available at course selection. The availability of third and fourth year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>seminar courses will vary. Students must check with the Department of Sociology and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Anthropology to see when seminar courses are available.</td>
</tr>
<tr>
<td></td>
<td>Pre requisite(s):</td>
<td>12.50</td>
<td>credits including SOC<em>3310, SOAN</em>3070, SOAN*3120</td>
</tr>
<tr>
<td></td>
<td>Department(s):</td>
<td></td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>SOC*4880</td>
<td>Special Projects in Sociology S,F,W (3-0) [0.50]</td>
<td></td>
<td>This special study/reading course option is designed to provide advanced undergraduates</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>with an opportunity to explore independently the frontiers and foundations of a field of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>knowledge. Under supervision, the student will study in greater depth topics related to</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>regular upper-level courses offered in the department which the student has taken or is</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>taking. Permission of the instructor who will be supervising the project is required.</td>
</tr>
<tr>
<td></td>
<td>Pre requisite(s):</td>
<td>12.50</td>
<td>credits</td>
</tr>
<tr>
<td></td>
<td>Restriction(s):</td>
<td></td>
<td>Instructor consent required. Please note, a student is allowed a total of 1.00 credits</td>
</tr>
<tr>
<td></td>
<td>Department(s):</td>
<td></td>
<td>only for reading courses.</td>
</tr>
<tr>
<td>SOC*4890</td>
<td>Special Projects in Sociology S,F,W (3-0) [0.50]</td>
<td></td>
<td>This special study/reading course option is designed to provide advanced undergraduates</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>with an opportunity to explore independently the frontiers and foundations of a field of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>knowledge. Under supervision, the student will study in greater depth topics related to</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>regular upper-level courses offered in the department which the student has taken or is</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>taking. Permission of the instructor who will be supervising the project is required.</td>
</tr>
<tr>
<td></td>
<td>Pre requisite(s):</td>
<td>12.50</td>
<td>credits</td>
</tr>
<tr>
<td></td>
<td>Restriction(s):</td>
<td></td>
<td>Instructor consent required. Please note, a student is allowed a total of 1.00 credits</td>
</tr>
<tr>
<td></td>
<td>Department(s):</td>
<td></td>
<td>only for reading courses.</td>
</tr>
<tr>
<td>SOC*4900</td>
<td>Honours Sociology Thesis I S,F,W (3-0) [0.50]</td>
<td></td>
<td>Development and design of an honours thesis proposal conducted under the supervision of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a faculty member. Recommended to Honours students.</td>
</tr>
<tr>
<td></td>
<td>Pre requisite(s):</td>
<td>15.00</td>
<td>credits including SOC<em>3310, SOAN</em>3070, SOAN*3120, CIPP students must have 15.00 credits</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>including SOC<em>2700, SOAN</em>3120, or POLS*3650</td>
</tr>
<tr>
<td></td>
<td>Restriction(s):</td>
<td></td>
<td>A cumulative average of 70% in all Sociology and Anthropology courses. Instructor consent</td>
</tr>
<tr>
<td></td>
<td>Department(s):</td>
<td></td>
<td>required.</td>
</tr>
<tr>
<td>SOC*4910</td>
<td>Honours Sociology Thesis II S,F,W (3-0) [0.50]</td>
<td></td>
<td>Completion and presentation of honours thesis.</td>
</tr>
<tr>
<td></td>
<td>Pre requisite(s):</td>
<td>SOC*4900</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Restriction(s):</td>
<td></td>
<td>Instructor consent required.</td>
</tr>
<tr>
<td></td>
<td>Department(s):</td>
<td></td>
<td>Department of Sociology and Anthropology</td>
</tr>
</tbody>
</table>
Sociology and Anthropology

Department of Sociology and Anthropology

The Department of Sociology and Anthropology offers three types of courses: sociology courses with the prefix SOC*; anthropology courses with the prefix ANTH*; and departmental courses with the prefix SOAN*.

SOAN*2111 Classical Theory F (3-0) [0.50]
First part of the two-semester course SOAN*2111/2. Refer to SOAN*2111/2 for course description.
Prerequisite(s): 1 of ANTH*1150, SOC*1100, SOC*1500
Department(s): Department of Sociology and Anthropology

SOAN*2112 Classical Theory W (3-0) [0.50]
Second part of the two-semester course SOAN*2111/2. Refer to SOAN*2111/2 for course description.
Prerequisite(s): SOAN*2111
Department(s): Department of Sociology and Anthropology

SOAN*2120 Introductory Methods F,W (3-0) [0.50]
A general introduction to the process of social research emphasizing research design, techniques of data collection, analysis and interpretation of research results.
Prerequisite(s): 1 of ANTH*1150, SOC*1100, SOC*1500
Restriction(s): Restricted to students in ANTH, BECN, CJFP, ID, SOC, BAG-ARTS
Department(s): Department of Sociology and Anthropology

SOAN*2200 Social Research Methods F (3-0) [0.50]
Non-quantitative techniques in social research including participant observation, unobtrusive methods, case studies and interviewing.
Prerequisite(s): SOAN*2100
Department(s): Department of Sociology and Anthropology

SOAN*3040 Globalization of Work and Organizations F (3-0) [0.50]
This course examines the social, economic, and political dimensions of work, locating work and its transformation within the broader context of globalization, economic restructuring, and shifts in public policy. Theoretical approaches and concepts used in the study of work will be introduced and critically assessed.
Prerequisite(s): 1 of ANTH*2160, IDEV*2500, SOAN*2112
Restriction(s): SOAN*2040
Department(s): Department of Sociology and Anthropology

SOAN*3070 Qualitative and Observational Methods W (3-0) [0.50]
This course explores families and households from a gender perspective, using insights from sociology and anthropology.
Prerequisite(s): 1 of ANTH*2160, SOAN*2112, SOAN*2400, SOAN*2120
Restriction(s): FRHD*3120
Department(s): Department of Sociology and Anthropology

SOAN*3120 Quantitative Methods F (3-0) [0.50]
This course introduces basic descriptive and inferential techniques used in quantitative social research. Students will acquire the skills needed to perform basic analyses and to read the research literature. They will also acquire skills in using a standard computer package to perform data analyses. Topics include: data organization, sample description, hypothesis testing and measures of association.
Prerequisite(s): SOAN*2120
Restriction(s): Restricted to students registered in Anthropology, Criminal Justice and Public Policy, Sociology, International Development (GAD or RAD).
Department(s): Department of Sociology and Anthropology

SOAN*3130 Protest, Resistance, and Collective Action W (3-0) [0.50]
The course introduces students to the study of social movements and contentious collective action, looking at the motivations, tactics, outcomes of movement participants, and how these are theorized.
Prerequisite(s): 1 of ANTH*2160, IDEV*2300, IDEV*2500, SOAN*2112
Department(s): Department of Sociology and Anthropology

SOAN*3240 Gender & Global Inequality I F (3-0) [0.50]
In this course, students will develop their ability to use a gender perspective to study social change in the context of global inequalities. Students will develop their knowledge of the core concepts and theories in Gender and Development (GAD) thinking and practice, while exploring the development process from a critical perspective.
Prerequisite(s): 1 of ANTH*2160, IDEV*2010, IDEV*2500, SOC*2080
Department(s): Department of Sociology and Anthropology

SOAN*3250 Social Change in Latin America W (3-0) [0.50]
This course provides a critical, comparative examination of the social-structural and cultural transformations occurring in Latin America in a context of deepening integration with the global north. Topics to feature prominently may include land reform, depeasantization, out-migration, maquiladoras, informal employment, race and ethnic relations, religiosity and religious identification, and social movements. The particular sub-regional focus may vary.
Prerequisite(s): 1 of ANTH*2160, IDEV*2010, IDEV*2500, SOC*2080
Department(s): Department of Sociology and Anthropology

SOAN*3260 Perspectives on Development F (3-0) [0.50]
This course examines theories and processes relating to international development and the responses to these by anthropologists and/or sociologists.
Prerequisite(s): 1 of ANTH*2160, IDEV*2010, IDEV*2300, IDEV*2500, SOC*2080
Restriction(s): ANTH*3680, Registration in Anthropology, Sociology or International Development.
Department(s): Department of Sociology and Anthropology

SOAN*4210 Indigenous-Settler Relations in Canadian Society W (3-0) [0.50]
This seminar-based course is designed to provide students with an opportunity to explore contemporary Indigenous-Settler relations in Canadian Society. Grounded in an exploration of worldviews and meaningful knowledge systems engagement, the course may explore governance, decolonisation, re-appropriation, reconciliation, etc. The specific content areas will vary depending on the instructor.
Prerequisite(s): 12.50 credits including (1 of ANTH*2660, IDEV*2400, IDEV*2500, GEOG*2210, SOAN*2290), (1 of GEOG*2260, IDEV*2100, SOAN*3070)
Equate(s): SOC*4310
Department(s): Department of Sociology and Anthropology

SOAN*4220 Gender and Change in Rural Canada F (3-0) [0.50]
This course examines socio-cultural structures affecting historically gendered positions and roles in rural Canada.
Offering(s): Offered in odd-numbered years.
Prerequisite(s): 12.50 credits including (1 of ANTH*2160, IDEV*2300, SOC*2080)
(1 of IDEV*2100, SOAN*2120, WMST*3000)
Department(s): Department of Sociology and Anthropology

SOAN*4230 Gender & Global Inequality II W (3-0) [0.50]
An in-depth and critical examination of a range of gender issues in the context of development, this course aims to enhance students’ ability to critically analyze development theory and practices using gender analysis. It provides students an opportunity to deepen their understanding of gender issues in a global context, with the aim of further equipping them to participate effectively in gender and development-related research, policy-making, and implementation.
Prerequisite(s): 12.50 credits including SOAN*3240, (1 of GEOG*3090, POLS*2650, POLS*3180, SOAN*2120)
Restriction(s): SOAN*4240
Department(s): Department of Sociology and Anthropology
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOAN*4250</td>
<td>Energy and Society F (3-0) [0.50]</td>
<td>This seminar addresses the links between social relations and various types of energy including petroleum, other hydrocarbons, nuclear and solar energies. Topics may include corporations, states, international organizations and popular movements.</td>
<td>12.50 credits including (IDEV<em>2100 or SOAN</em>2120), (1 of ANTH<em>2160, IDEV</em>2300, SOAN<em>2112, SOC</em>2080)</td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>SOAN*4260</td>
<td>Migration, Inequality and Social Change W (3-0) [0.50]</td>
<td>This seminar critically examines the complex relationships between migration, inequality and social change. Students will develop their understanding of key debates in contemporary migration, exploring relevant theory, research and public policy. Topics may include the migration-development nexus, the role of migration policies in structuring inequalities, migrant rights and resistance, and transnational families.</td>
<td>12.50 credits including (IDEV<em>2100 or SOAN</em>2120), (1 of ANTH<em>2160, IDEV</em>2300, IDEV<em>2500, SOAN</em>2112, SOC*2080)</td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>SOAN*4320</td>
<td>Transition from School to Work W (3-0) [0.50]</td>
<td>This applied course examines the evolving research and models in the transitions from school to work area. There is an evolving literature in this area based, in part, on the successful application of research in the transition from high school to postsecondary education. This 'capstone' course also considers the practical issues involved in making such a move, considering the knowledge, skills, and values needed by university students to succeed in the modern workplace (public, private, and not-for-profit sectors) in Canada. Students will complete an &quot;Action Sociology/Anthropology Project,&quot; as well as a &quot;Skills Portfolio,&quot; and other work related to their own transition.</td>
<td>Registration in Sociology, Anthropology or Criminal Justice &amp; Public Policy majors in semester 7 or 8.</td>
<td>Department of Sociology and Anthropology</td>
</tr>
<tr>
<td>SOAN*4500</td>
<td>Community Development W (3-0) [0.50]</td>
<td>An analysis of approaches to community development defined as planned, change-directed action undertaken by individuals, groups and organizations. The course will include the examination of actual community development practices.</td>
<td>(1 of ANTH<em>2160, IDEV</em>2010, IDEV<em>2500, SOC</em>2080), (GEOG<em>2210 or SOAN</em>2120)</td>
<td>Department of Sociology and Anthropology</td>
</tr>
</tbody>
</table>
Spanish

School of Languages and Literatures

All courses are conducted in Spanish (reading, writing and speaking), and literary texts are, at all levels, studied in the original language.

**SPAN*1100 Introductory Spanish I F,W (3-1) [0.50]**
This course introduces students to the basics of spoken and written Spanish through the study of grammar and vocabulary. The course is for students with no previous studies in Spanish.

*Offering*: Also offered through Distance Education format.

*Equate(s)*: HISP*1100

*Department(s)*: School of Languages and Literatures

**SPAN*1110 Introductory Spanish II F,W (3-1) [0.50]**
This is a continuation of SPAN*1100. Students will develop and apply increased reading, writing, listening and oral skills in Spanish through the study of new vocabulary and grammatical structures and culture.

*Offering*: Also offered through Distance Education format.

*Equate(s)*: HISP*1110

*Department(s)*: School of Languages and Literatures

**SPAN*2000 Intermediate Spanish I F,W (3-1) [0.50]**
This course is for students who have completed either first year University Spanish or 4U Spanish as well as for those who are heritage speakers. This course examines cultural topics and grammatical structures in greater depth while focusing on vocabulary acquisition, and development of oral, written, and listening skills.

*Equate(s)*: HISP*2000

*Department(s)*: School of Languages and Literatures

**SPAN*2010 Intermediate Spanish II F,W (3-1) [0.50]**
Students will acquire and apply improved skills in reading, writing, and conversation through further study of grammar and culture. The course encourages students to enhance their analytical and linguistic skills through the use of appropriate structures as they formulate and support opinions.

*Prerequisite(s)*: HISP*2000 or SPAN*2000

*Equate(s)*: HISP*2010

*Department(s)*: School of Languages and Literatures

**SPAN*2040 Culture of Spain F (3-0) [0.50]**
This course is an examination of the historical and cultural events that provided the background for the development of modern Spain, as well as a visual survey of Spanish culture.

*Offering*: Offered in odd-numbered years.

*Prerequisite(s)*: HISP*1110 or SPAN*1110

*Equate(s)*: HISP*2040

*Department(s)*: School of Languages and Literatures

**SPAN*2990 Hispanic Literary Studies W (3-0) [0.50]**
This course is an introduction to literary studies in Spanish. The course focuses on critical terminology and methods through a selection of prose, poetry and drama from Spain and Spanish America.

*Prerequisite(s)*: HISP*1110 or SPAN*1110

*Equate(s)*: HISP*2990

*Department(s)*: School of Languages and Literatures

**SPAN*3080 Spanish American Culture F (3-0) [0.50]**
This course is a survey through selected readings, class discussion and audio-visual materials of the Spanish American countries, their histories, society, institutions and culture.

*Offering*: Offered in even-numbered years.

*Prerequisite(s)*: HISP*2000 or SPAN*2000

*Equate(s)*: HISP*3080

*Department(s)*: School of Languages and Literatures

**SPAN*3210 Topics in Hispanic Studies F,W (3-0) [0.50]**
This course, taught in Spanish, with texts in the original language, provides an intensive study of a specific aspect of Hispanic Studies.

*Prerequisite(s)*: ( HISP*3220 or SPAN*3220), ( HISP*3230 or SPAN*3230)

*Equate(s)*: HISP*3210

*Department(s)*: School of Languages and Literatures

**SPAN*3220 Literature and Arts I: Spain F (3-0) [0.50]**
This course will be taught in Spanish, with texts studied in the original language, and provides a detailed examination of a theme, period or movement in the literature and/or arts of Spain.

*Prerequisite(s)*: HISP*2990 or SPAN*2990

*Equate(s)*: HISP*3220

*Department(s)*: School of Languages and Literatures

**SPAN*3230 Literature and Arts II: Latin America W (3-0) [0.50]**
This course will be taught in Spanish, with texts studied in the original language, and provides a detailed examination of a theme, period or movement in the literature and/or arts of Latin America.

*Prerequisite(s)*: HISP*2990 or SPAN*2990

*Equate(s)*: HISP*3230

*Department(s)*: School of Languages and Literatures

**SPAN*3240 Topics in Hispanic Linguistics W (3-0) [0.50]**
This course offers an introduction to linguistic topics including history of the Spanish language, language variation and change, and Spanish phonetics, which may vary from year to year.

*Offering*: Offered in odd-numbered years.

*Prerequisite(s)*: HISP*1110 or SPAN*1110

*Equate(s)*: HISP*3240

*Department(s)*: School of Languages and Literatures

**SPAN*3300 Advanced Spanish I F (3-0) [0.50]**
This is an advanced language course that focuses on the refinement of students' written and verbal communication skills in Spanish.

*Prerequisite(s)*: HISP*2010 or SPAN*2010

*Equate(s)*: HISP*3300

*Department(s)*: School of Languages and Literatures

**SPAN*3700 Experiential Learning and Language S,F,W (0-0) [0.50]**
This course provides an opportunity for independent study based on an experiential project in Spanish or Hispanic Studies. The project (approximately 70 hours) must be approved by a faculty member in the School of Languages and Literatures. It will include research about experiential learning, a reflective piece of writing and a public oral presentation about the project.

*Offering*: Also offered through Distance Education format.

*Prerequisite(s)*: 10.00 credits including 1.50 credits in Spanish.

*Restriction(s)*: A minimum cumulative average of 70% in all Spanish course attempts. Instructor consent required.

*Department(s)*: School of Languages and Literatures

**SPAN*3800 Directed Readings in Hispanic Studies U (3-0) [0.50]**
A reading course in Spanish or Spanish American literature designed according to the previous studies and the interests of the individual student. Normally, students will not be permitted to take more than two courses in the Directed Readings sequence.

*Prerequisite(s)*: 1.00 credits from the following: ( HISP*3220 or SPAN*3220), ( HISP*3230 or SPAN*3230), SPAN*3080

*Equate(s)*: HISP*3800

*Restriction(s)*: Instructor consent required.

*Department(s)*: School of Languages and Literatures

**SPAN*3810 Directed Readings in Hispanic Studies U (3-0) [0.50]**
A reading course in Spanish or Spanish American literature designed according to the previous studies and the interests of the individual student. Normally, students will not be permitted to take more than two courses in the Directed Readings sequence.

*Prerequisite(s)*: 1.00 credits from the following: ( HISP*3220 or SPAN*3220), ( HISP*3230 or SPAN*3230), SPAN*3080

*Equate(s)*: HISP*3810

*Restriction(s)*: Instructor consent required.

*Department(s)*: School of Languages and Literatures

**SPAN*4100 Seminar in Hispanic Studies F,W (3-0) [1.00]**
This seminar is taught in Spanish, with texts studied in the original language. It provides an opportunity for students to study and research a specific aspect of Hispanic Studies.

*Prerequisite(s)*: ( HISP*4410 or SPAN*4410), ( HISP*4420 or SPAN*4420)

*Department(s)*: School of Languages and Literatures
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
</table>
| SPAN*4410  | Senior Seminar on Latin American W (3-0) | [1.00]  | This capstone seminar is taught in Spanish, with texts studied in the original language, and will explore in detail a major movement, period or theme in Latin American literature or culture. Students who have completed this course previously should register in SPAN*4100.  
**Offering(s):** Offered in odd-numbered years.  
**Prerequisite(s):** HISP*2990 or SPAN*2990  
**Department(s):** School of Languages and Literatures |
| SPAN*4420  | Senior Seminar on Spain or Africa W (3-0) | [1.00]  | This seminar is taught in Spanish, with readings from texts in the original language. It addresses a major issue, movement, theme or period in the literature and culture of Spain, or, in some years, of the Spanish-speaking regions of Africa.  
**Offering(s):** Offered in even-numbered years.  
**Prerequisite(s):** HISP*2990 or SPAN*2990  
**Department(s):** School of Languages and Literatures |
| SPAN*4500  | Spanish Translation - Theory and Practice W (3-0) | [1.00]  | This course introduces students to the theory and practice of translation by applying current theoretical principles and linguistic precision to the process of translation from Spanish to English and English to Spanish. Students work with a variety of texts from multiple fields, including journalism, business, science and literature.  
**Prerequisite(s):** HISP*3500 or SPAN*3500  
**Equate(s):** HISP*4500  
**Department(s):** School of Languages and Literatures |
| SPAN*4840  | Research Paper in Hispanic Studies U (3-0) | [1.00]  | Students will write an intensive research paper in Spanish on a topic relating to a literary or linguistic subject in Hispanic Studies. This paper will be completed within one semester and students will be assigned to a faculty supervisor who will oversee the project.  
**Prerequisite(s):** (HISP*3220 or SPAN*3220), (HISP*3230 or SPAN*3230)  
**Equate(s):** HISP*4840  
**Restriction(s):** Instructor consent required.  
**Department(s):** School of Languages and Literatures |
Department of Mathematics and Statistics

Suggested initial course sequences:

1. For students interested in applied statistics a minimal course sequence is: (STAT*2040 or STAT*2100), STAT*2050, STAT*3210, STAT*3240, STAT*3320.
2. Credit may be obtained in only 1 of STAT*2050 or STAT*2090 and only 1 of STAT*2040, STAT*2060, STAT*2080, STAT*2100, or STAT*2120.
3. Graduate students may be admitted to later parts of a sequence by permission of the department.
4. Students who major or minor in Statistics may not receive credit for the following courses unless taken to satisfy the requirements of another program: ECON*2740, PSYC*3210, PSYC*3320.

STAT*2040 Statistics I S,E,F,W (3-0) [0.50]
This course focuses on the practical methods of Statistics and the topics include: descriptive statistics; univariate models such as binomial, Poisson, uniform and normal; the central limit theorem; expected value; the t, F and chi-square models; point and interval estimation; hypothesis testing methods up to two-sample data; simple regression and correlation; introduction to analysis of variance. Assignments will deal with real data from the natural sciences and involve the use of statistical software for computing and visualization.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): 1 of 4U Calculus and Vectors, Advanced Functions and Calculus, OAC Calculus, MATH*1080
Restriction(s): STAT*2060, STAT*2080, STAT*2120, STAT*2230
Department(s): Department of Mathematics and Statistics

STAT*2050 Statistics II F,W (3-0) [0.50]
In this course, students will learn how to implement good study design and analyze data from complex studies. This course follows naturally from STAT*2040 and features both previously unseen statistical techniques, as well as studying in greater depth some topics covered in STAT*2040. These topics will include: experiments and observational studies; a review of t-tests and confidence intervals; confounding variables; association and causality; Analysis of Variance (ANOVA); simple and multiple linear regression; binary responses (logistic regression); odds ratios and relative risk; and an introduction to experimental design (including blocked designs and factorial treatment designs). Assignments carried out using modern statistical software will form the basis for mastering the material.
Prerequisite(s): 1 of STAT*2040, STAT*2060, STAT*2120, STAT*2230
Restriction(s): STAT*2090
Department(s): Department of Mathematics and Statistics

STAT*2060 Statistics for Business Decisions F,W (3-0) [0.50]
This course is designed for students interested in the application of statistics in a business setting. Topics covered will include the role of statistics in business decisions, organization of data, frequency distributions, probability, normal and sampling distributions, hypothesis tests, linear regression and an introduction to time series, quality control and operations research.
Offering(s): Also offered through Distance Education format.
Prerequisite(s): (4U mathematics or equivalent) or 0.50 credit in mathematics
Restriction(s): STAT*2040, STAT*2080, STAT*2120. Not available to B.Sc. students.
Department(s): Department of Mathematics and Statistics

STAT*2080 Introductory Applied Statistics I F (3-0) [0.50]
The topics covered in this course include: Frequency distributions, graphing and tabulation of data; measures of central tendency, variability and association; elementary probability; hypothesis testing and confidence intervals; basic concepts of experimental design; treatment designs; simple linear regression and correlation. Examples come from a variety of disciplines, including family studies, education, marketing, medicine, psychology and sociology.
Prerequisite(s): (4U mathematics or equivalent) or 0.50 credit in mathematics
Restriction(s): STAT*2040, STAT*2060, STAT*2100, STAT*2120. BSc students cannot take this course for credit.
Department(s): Department of Mathematics and Statistics

STAT*2090 Introductory Applied Statistics II W (3-0) [0.50]
The topics covered in this course include: analysis of qualitative data; analysis of variance for designed experiments; multiple regression; exposure to non-parametric methods; power and sample size calculations; special topics such as logistic regression. Examples come from a variety of disciplines, including nutrition, family studies, education, marketing, medicine, psychology and sociology.
Prerequisite(s): STAT*2080
Restriction(s): BIOL*2250, STAT*2050, STAT*2250
Department(s): Department of Mathematics and Statistics

STAT*2120 Probability and Statistics for Engineers F,W (3-0) [0.50]
The topics covered in this course include: Sample spaces; probability, conditional probability and independence; Bayes' theorem; probability distributions; probability densities; algebra of expected values; descriptive statistics; inferences concerning means, variances, and proportions; curve fitting, the method of least squares and correlation. An introduction to quality control and reliability is provided. This course is recommended for students in the B.Sc.(Eng.) program.
Prerequisite(s): 1 of IPS*1510, MATH*1210, MATH*2080
Restriction(s): STAT*2040, STAT*2060, STAT*2080, STAT*2100
Department(s): Department of Mathematics and Statistics

STAT*2230 Biostatistics for Integrative Biology W (3-2) [0.50]
This course introduces students to the design, completion and interpretation of research projects, including identifying categories of research questions, types of data, data gathering methods, efficient graphic and numeric methods to summarize data, standard statistical analyses involving parameter estimation and hypothesis tests and interpreting results in the context of research goals. Statistical concepts underlying practical aspects of biological research will be emphasized. Computer-intensive laboratory sessions will focus on practical data organization, visualization, statistical analysis using software, and interpretation and communication of statistical results.
Prerequisite(s): BIOL*1070
Restriction(s): BIOL*2250, STAT*2040, STAT*2060, STAT*2080, STAT*2120, STAT*2250. Restricted to students in the BSC majors in BIOD, MBF, WBC, WLB, and ZOO, and BSES majors in ECOL and ECOL.C.
Department(s): Department of Mathematics and Statistics, Department of Integrative Biology

STAT*3100 Introductory Mathematical Statistics I F (3-0) [0.50]
The topics covered in this course include: Probability spaces; discrete and continuous random variables; multivariate distributions; expectations; moments, Chebyshev's inequality, product moments; sums of random variables, generating functions; Gamma, Beta, t and F distributions; central limit theorem; sampling distributions.
Prerequisite(s): (1 of IPS*1510, MATH*1210, MATH*2080 ), (STAT*2040 or STAT*2120)
Department(s): Department of Mathematics and Statistics

STAT*3110 Introductory Mathematical Statistics II W (3-0) [0.50]
Estimation, unbiasedness, Cramer-Rao inequality, consistency, sufficiency, method of moments, maximum likelihood estimation; hypothesis testing, Neyman-Pearson lemma, likelihood ratio test, uniformly most powerful test; linear regression and correlation; non-parametric methods.
Prerequisite(s): STAT*3100
Department(s): Department of Mathematics and Statistics

STAT*3210 Experimental Design F (3-0) [0.50]
This course presents the basic principles of design: randomization, replication, and local control (blocking); RCBD, Latin square and crossover designs, incomplete block designs, factorial and split-plot experiments, confounding and fractional factorial designs, response surface methodology; linear mixed model computer analysis of the designs; nonparametric methods; Taguchi philosophy.
Offering(s): Offered in even-numbered years.
Prerequisite(s): STAT*2050
Department(s): Department of Mathematics and Statistics

STAT*3240 Applied Regression Analysis F (3-1) [0.50]
This course reviews simple linear regression and introduces multiple regression with emphasis on theory of least squares estimation, residual analysis, and model interpretation. Within the multiple regression context, transformations of variables, interactions, model selection techniques, ANOVA, influence diagnostics and multicollinearity will be discussed. Topics may also include Box-Cox transformations, weighted regression, and logistic and Poisson regression. This course is supplemented with computer labs involving interactive data analysis using statistical software.
Prerequisite(s): (1 of IPS*1510, MATH*1210, MATH*2080 ), (1 of MATH*1160, MATH*2150, MATH*2160 ), STAT*2050
Department(s): Department of Mathematics and Statistics

STAT*3320 Sampling Theory with Applications F (3-0) [0.50]
This course focuses on the design and analysis of survey samples for finite populations. Topics covered include: non-probability and probability sampling, simple random sampling, stratified sampling, cluster sampling, systematic sampling, double sampling, two-phase sampling and multi-stage cluster sampling. Expectation, variance estimation results in the context of research goals. Statistical concepts underlying practical aspects of biological research will be emphasized. Computer-intensive laboratory sessions will focus on practical data organization, visualization, statistical analysis using software, and interpretation and communication of statistical results.
Prerequisite(s): WBC, WLB, and ZOO, and BSES majors in ECOL and ECOL.C.
Restriction(s):
Department(s): Department of Mathematics and Statistics, Department of Integrative Biology

2019-2020 Undergraduate Calendar
Last Revision: July 4, 2019
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
</table>
| STAT*3510   | Environmental Risk Assessment W (3-0) [0.50] | Contemporary statistical methods for assessing risk are discussed. Topics covered include: dose-response models, survival analysis, relative risk analysis, bioassay, estimating methods for zero risk, trend analysis, survey of models for assessing risk. Case studies are used to illustrate the methods. | Prequisite(s): STAT*2050  
Department(s): Department of Mathematics and Statistics |
| STAT*4000   | Statistical Computing F (3-0) [0.50] | The topics in this course will include pseudorandom number generation, numerical optimization as used in statistics, simulation study design, Monte Carlo integration and variance reduction, and bootstrapping. Other topics may include permutation tests, visualization of multivariate data, and big data. | Prequisite(s): MATH*2130, STAT*2050, STAT*3110  
Department(s): Department of Mathematics and Statistics |
| STAT*4050   | Topics in Applied Statistics I W (3-0) [0.50] | Topics such as statistical computing procedures, quality control, bioassay, survival analysis and introductory stochastic processes will be covered. This course is intended for statistics students and interested students from other disciplines who have appropriate previous courses in statistics. Information on particular offerings will be available at the beginning of each academic year. | Offering(s): Offered in odd-numbered years.  
Prequisite(s): STAT*3110, STAT*3240  
Department(s): Department of Mathematics and Statistics |
| STAT*4060   | Topics in Applied Statistics II W (3-0) [0.50] | Same as for STAT*4050. | Offering(s): Offered in even-numbered years.  
Prequisite(s): STAT*3110, STAT*3240  
Department(s): Department of Mathematics and Statistics |
| STAT*4150   | Topics in Applied Statistics III F,W (3-0) [0.50] | In this course students will discuss selected topics at an advanced level as in STAT*4050, but with different choice of topics. | Prequisite(s): STAT*3110, STAT*3240  
Department(s): Department of Mathematics and Statistics |
| STAT*4340   | Statistical Inference W (3-0) [0.50] | This course reviews and extends the theory of estimation introduced in STAT*3110. Topics including point estimation, interval estimation, hypothesis testing and decision theory will be presented from both the frequentist and likelihood-based perspectives. Foundational issues concerning the frequentist and Bayesian paradigms will also be discussed. | Prequisite(s): STAT*3110, STAT*3240  
Department(s): Department of Mathematics and Statistics |
| STAT*4350   | Applied Multivariate Statistical Methods F (3-0) [0.50] | This course introduces the multivariate normal, and Wishart and Hotelling’s T-square distributions. Topics covered include: statistical inference on the mean vector, canonical correlation, multivariate analysis of variance and covariance, multivariate regression, principal components analysis, and factor analysis. Topics will be illustrated using examples from various disciplines. | Prequisite(s): (1 of MATH*1160, MATH*2150, MATH*2160), STAT*3110, STAT*3240  
Department(s): Department of Mathematics and Statistics |
| STAT*4360   | Applied Time Series Analysis F (3-0) [0.50] | This course will investigate the nature of stationary stochastic processes from the spectral and time domain points of view. Aspects of parameter estimation and prediction in a computationally intensive environment will be the presentation style. The methods developed in this course will have applicability in many sciences such as engineering, environmental sciences, geography, soil sciences, and life sciences. | Prequisite(s): STAT*3240  
Department(s): Department of Mathematics and Statistics |
| STAT*4600   | Advanced Research Project in Statistics F,W (0-6) [1.00] | Each student in this course will undertake an individual research project in some area of statistics, under the supervision of a faculty member. A written report and a public presentation of the project will be required. | Restriction(s): Approval of a supervisor and the course coordinator.  
Department(s): Department of Mathematics and Statistics |
Studio Art

School of Fine Art and Music

Admission to all Studio Art courses is based on the university's policy with regard to Priority Access Courses. Admission to ALL Studio Courses at the 3000-level and above is restricted to students who:

1. are currently registered in the Art History or Studio Art Specializations of the Bachelor of Arts Program;
2. have an average of 70% in all ARTH and SART course attempts;
3. have completed (ARTH*1220 or ARTH*2200 ) or (ARTH*1510 or ARTH*1520), SART*1050 and SART*1060.

School of Fine Art and Music

SART*1060 Foundation Studio F,W (2-4) [0.50]

This course provides a foundation in the technical and theoretical aspects of contemporary two-dimensional media. Through a combination of lectures, studio projects, readings and a field trip the students will explore perceptual, conceptual and topical dimensions of art making practices.

Restriction(s): Registration in semesters one, two, three or four. May not register in SART*1060 in the same term. This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations during certain periods. Please see the departmental website for more information.

Department(s): School of Fine Art and Music

SART*1060 Core Studio F,W (2-4) [0.50]

This course provides a foundation in the technical and theoretical aspects of contemporary three-dimensional and time-based media. Through a combination of lectures, studio projects and guest speakers, students will explore perceptual, conceptual and topical dimensions of contemporary art making practices.

Restriction(s): Registration in semesters one, two, three or four. May not register in SART*1050 in the same term. This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations during certain periods. Please see the departmental website for more information.

Department(s): School of Fine Art and Music

SART*1150 Contemporary Artistic Practice F (3-0) [0.50]

This course, which uses a web-based platform, is an introduction to contemporary art and artists. Lectures will be augmented by studio art assignments and online discussions in order to develop an understanding of material covered in the course.

Offering(s): Offered through Distance Education format only.

Department(s): School of Fine Art and Music

SART*2090 Drawing I F,W (0-6) [0.50]

This course will consider the activity of drawing as an ability to work with a varied range of applications – all of them concerned with the investigation and development of ideas through making an image. This course is an introduction to the basic concepts, techniques and media of drawing, through disciplined observational and imaginative study.

Prerequisite(s): (1 of ARTH*1220 , ARTH*1510, ARTH*1520), SART*1050, SART*1060

Co-requisite(s): SART*1060 can be taken as co-requisite

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations, majors or semester levels during certain periods. Please see the department for more information.

Department(s): School of Fine Art and Music

SART*2200 Painting I F,W (0-6) [0.50]

This course is designed to introduce students to the fundamentals of observational painting in oil and acrylic paint. In addition to developing skill in colour-mixing, composition, and using value to create space and form, students will learn proper care for tools and how to prepare supports. Regular discussions of contemporary and relevant historical examples will assist students to understand their work as part of the broader conversation and discourse in painting. Prior or concurrent Drawing classes are recommended.

Prerequisite(s): (1 of ARTH*1220 , ARTH*1510, ARTH*1520), SART*1050, SART*1060

Co-requisite(s): SART*1060 can be taken as co-requisite

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations, majors or semester levels during certain periods. Please see the department for more information.

Department(s): School of Fine Art and Music

SART*2300 Sculpture I F,W (0-6) [0.50]

This course is an introduction to contemporary sculptural concerns through projects, readings and visual research. Sculptural principles of form and space will be addressed through hands-on engagement with a variety of materials and methods. Readings provide an overview of Modernist sculpture and basic critical theory.

Prerequisite(s): (1 of ARTH*1220 , ARTH*1510, ARTH*1520, ARTH*2220), SART*1050, SART*1060

Co-requisite(s): SART*1050 can be taken as co-requisite

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations, majors or semester levels during certain periods. Please see the department for more information.

Department(s): School of Fine Art and Music

SART*2460 Printmaking F (0-6) [0.50]

This course is an introduction to the printmaking media of intaglio, relief and silkscreen. Conceptual issues will be examined in relation to the creation of prints with discussions around the characteristics of the edition, the monoprint and the series through printmaking objects and readings.

Prerequisite(s): (1 of ARTH*1220 , ARTH*1510, ARTH*1520, ARTH*2220), SART*1050, SART*1060

Co-requisite(s): SART*1060 can be taken as co-requisite

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations, majors or semester levels during certain periods. Please see the department for more information.

Department(s): School of Fine Art and Music

SART*2610 Photography I F,W (0-6) [0.50]

This course is an introduction to the historic, conceptual, and material nature of photography in contemporary art. Course content will include basic digital, analogue and studio techniques, and an exploration of historic techniques such as the Photogram and Camera Obscura. Readings, discussions, and assignments will forge connections between historic and contemporary modes of image making, and will encourage students to experiment with innovative ways of utilizing the photographic medium.

Prerequisite(s): (1 of ARTH*1220 , ARTH*1510, ARTH*1520, ARTH*2220), SART*1050, SART*1060

Co-requisite(s): SART*1060 can be taken as co-requisite

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations, majors or semester levels during certain periods. Please see the department for more information.

Department(s): School of Fine Art and Music

SART*2700 Digital Media I: Using Vector and Raster Images F (0-6) [0.50]

This course provides an in-depth introduction to the image making possibilities in digital media. Students will learn various methods of drawing vector-based imagery and compositing raster images in industry-leading drawing and image creation applications. Readings covering relevant principles and theories in digital media will form a critical supplement to the course. Some computer experience is recommended.

Prerequisite(s): (1 of ARTH*1220 , ARTH*1510, ARTH*1520, ARTH*2220), SART*1050, SART*1060

Co-requisite(s): SART*1060 can be taken as co-requisite

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations, majors or semester levels during certain periods. Please see the department for more information.

Department(s): School of Fine Art and Music

SART*2710 Digital Media II: Animation W (0-6) [0.50]

This course adds to the important key concepts and methods unique to digital media introduced in Digital Media I with an in-depth introduction to animation in digital media. Students will learn a number of basic principles and methods in animation using industry standard digital tools. Students will apply their understanding of these concepts and methods for the production of a number of short animated sequences using industry leading vector-based animation and motion graphics application software. Readings covering relevant principles and theories will form a critical supplement to the course.

Prerequisite(s): SART*2700

Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations, majors or semester levels during certain periods. Please see the department for more information.

Department(s): School of Fine Art and Music
SART*2800 Experimental Studio I F,W (0-6) [0.50]
This course introduces students to different processes used by the contemporary studio artist, with an emphasis on time-based and interdisciplinary forms of production. Students will be actively engaged in exploring a variety of skills, processes and concepts, in the development of video, multimedia, artist multiples, and site-specific interventions. An understanding of the technical, theoretical, and historical concerns of experimental art practices will provide a solid base for upper level courses, where students will develop a stronger capacity to work with media that are appropriate to realize their ideas.
Prerequisite(s): (1 of ARTH*1220, ARTH*1510, ARTH*1520, ARTH*2220), SART*1050, SART*1060
Co-requisite(s): SART*1050 can be taken as co-requisite
Restriction(s): This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations, majors or semester levels during certain periods. Please see the department for more information.
Department(s): School of Fine Art and Music

SART*3090 Drawing II F,W (0-6) [0.50]
This course attempts to foster understanding of the basis and technical issues necessary to the making of drawings while introducing the philosophical and critical issues related to the discipline. This course will consider drawing as an activity with a wide range of applications.
Prerequisite(s): SART*2090
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 70% in all ARTH and SART course attempts.
Department(s): School of Fine Art and Music

SART*3200 Painting II F,W (0-6) [0.50]
In this course, technical, aesthetic and philosophical issues central to contemporary painting will be investigated. These include diverse approaches to representational painting today as well as an introduction to abstraction and other non-representational strategies. Activities such as class discussions, field trips and presentations on contemporary artists will assist students to situate their own developing practices within the field.
Prerequisite(s): SART*2200
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 70% in all ARTH and SART course attempts.
Department(s): School of Fine Art and Music

SART*3300 Sculpture II F,W (0-6) [0.50]
This is a technical and experimental course. Critical issues in modernist and post-modernist sculpture will be explored and deployed. Projects will focus on the tools and operations of the wood shop, axioms and principles of modernism, operations of the welding shop and 3D printing, and the critical and generative principles of post-modernism.
Prerequisite(s): SART*2300
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 70% in all ARTH and SART course attempts.
Department(s): School of Fine Art and Music

SART*3470 Printmaking and Photo/Digital Technologies F (0-6) [0.50]
This course will introduce the use of contemporary digital imaging for printmaking applications in etching, silkscreen and lithography. File preparation, film input, digital prints and mixed media approaches will be covered. Conceptual issues will be examined in relation to the creation of prints with discussions around the use of digital files and output as a source for printmaking.
Prerequisite(s): SART*2460
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 70% in all ARTH and SART course attempts.
Department(s): School of Fine Art and Music

SART*3480 Digital Media III: Creating Content for the Web F (0-6) [0.50]
This course introduces students to key methods behind the design, development, and delivery of a modern website. Students will gain a stronger grasp of the syntax, standards and methods for using HTML, CSS, and will be introduced to JavaScript to display a variety of static and dynamic content on the Web introduced in Digital Media I and II. Readings covering relevant principles and theories will give students a stronger critical awareness of the Internet as a medium for expression, and a variety of in-class exercises will guide students towards the completion of a fully functional final website.
Prerequisite(s): SART*2710
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 70% in all ARTH and SART course attempts.
Department(s): School of Fine Art and Music

SART*3600 Digital & Non-Silver Photography W (0-6) [0.50]
This course combines non-silver and digital photographic methods as the basis for an aesthetic investigation into the formal, conceptual, technical and theoretical issues related to historic and new technologies in photographic practice. Course content will include non-silver printing such as Platinum/Palladium, large format photography, and an exploration of scale in digital photographic production. In-class discussions, readings and seminars are designed to provide students with a critical and historical understanding of the art-making process.
Prerequisite(s): SART*2610
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 70% in all ARTH and SART course attempts.
Department(s): School of Fine Art and Music

SART*3660 Printmaking II F,W (0-6) [0.50]
This course provides an introduction to stone lithography and will continue to investigate the formal and technical aspects of printmaking techniques covered in SART*2460. Students will be actively engaged in exploring contemporary concerns in printmaking through ideas of dissemination, sequence and systems through scrutiny of printmaking objects and readings.
Prerequisite(s): SART*2460
Restriction(s): SART*3450
Department(s): School of Fine Art and Music

SART*3750 Photography II F,W (0-6) [0.50]
This course encourages visual problem solving and analytical skills within an experimental and exploratory studio art practice. Course material is presented through lectures, labs, and critiques to engage with the form, content and technical attributes of the medium. Scale, electronic flash lighting, medium format photography, and darkroom printing will be covered. In-class discussions, readings and seminars are designed to provide students with a critical and historical understanding of the art-making process.
Prerequisite(s): SART*2610
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 70% in all ARTH and SART course attempts.
Department(s): School of Fine Art and Music

SART*3770 Experimental Studio II F,W (0-6) [0.50]
Students will explore and consider the found object and appropriation in art, the use of language and text in art, and other conceptual art practices in various media. In a context of critical reading, writing, class exercises and discussion - students will continue developing their technical skills in video and sound production. We may also consider such forms as collage, the artist book and/or artist multiple, performance, social practice art, and other experimental studio strategies.
Prerequisite(s): SART*2800
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 70% in all ARTH and SART course attempts.
Department(s): School of Fine Art and Music

SART*3800 Experiential Learning I S,F,W (0-6) [0.50]
This is an independent study course based on Studio Art-related practical experience. Evaluation will be based on assignments related to work duties. Written proposals, signed by the supervisor and a faculty member, must be submitted to the Director for the School for approval by the last day of course selection in the Fall (for Winter) or Winter (for the following Summer or Fall).
Prerequisite(s): 3.00 credits in Studio Art
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 70% in all ARTH and SART course attempts. Instructor consent required.
Department(s): School of Fine Art and Music

SART*3900 Experiential Learning II S,F,W (0-6) [0.50]
This course provides students with an opportunity to continue the workplace or activity begun in SART*3800 in greater depth, or to experience a new work/study situation. Evaluation will be based on assignments related to work duties. Written proposals, signed by the supervisor and a faculty member, must be submitted to the Director for the School for approval by the last day of course selection in the Fall (for Winter) or Winter (for the following Summer or Fall) semester.
Prerequisite(s): SART*3800 and 3.50 credits in Studio Art
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 80% in all ARTH and SART course attempts.
Restriction(s): Instructor consent required.
Department(s): School of Fine Art and Music

Last Revision: July 4, 2019  2019-2020 Undergraduate Calendar
SART*3090 Drawing III F (0-6) [0.50]
This course will study the technical development of observational drawing as well as the experimental and intentional development of drawing as a contemporary art form. Drawings will be made and discussed with attention to semiotic theory in order to examine the production and interpretation of meaning.
Prerequisite(s): SART*3090
Restriction(s): Registration is limited to students registered in the Studio Art Major with an average of 70% in all ARTH and SART course attempts. This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): School of Fine Art and Music

SART*4130 Drawing IV W (0-6) [1.00]
This is an advanced course which explores drawing through individually oriented production supported by critical study of diverse contemporary approaches to the medium. In this course drawings will continue to be considered in the light of semiotic theory in order to examine the production and interpretation of meaning.
Prerequisite(s): SART*4090
Restriction(s): Registration is limited to students registered in the Studio Art Major with an average of 70% in all ARTH and SART course attempts. This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): School of Fine Art and Music

SART*4410 Printmaking III F (0-6) [0.50]
This course focuses on independent work with an emphasis on an experimental use of printmaking media. Students will continue to investigate digital and traditional printmaking methods. There will be greater emphasis on the critical issues relevant to printmaking with attention to clarity of personal statement, originality and professionalism both in studio practice and discussion.
Prerequisite(s): SART*3450 or (3 of SART*2460, SART*2470, SART*3410, SART*3450, SART*3470)
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 70% in all ARTH and SART course attempts. This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): School of Fine Art and Music

SART*4470 Printmaking IV W (0-6) [1.00]
This course focuses on independent work with an emphasis on an experimental use of printmaking media. Students will continue to investigate digital and traditional printmaking methods. There will be greater emphasis on the critical issues relevant to printmaking with attention to clarity of personal statement, originality and professionalism both in studio practice and discussion.
Prerequisite(s): SART*4410
Restriction(s): Registration is limited to students registered in the Studio Art Major with an average of 70% in all ARTH and SART course attempts. This is a Priority Access Course. Some restrictions may apply during some time periods.
Department(s): School of Fine Art and Music

SART*4660 Topics in Experimental Studio F (0-6) [0.50]
For this advanced course, a specific and timely theme, subject, or technique will be explored in a context of critical reading, writing, class exercises and discussion. Topics will vary according to the proposals of artist-instructors. Students will be encouraged to produce works in media such as video art, audio art, artist book and/or multiple, performance, social practice art, interventions, and other "post-studio" and experimental studio practices.
Prerequisite(s): SART*3770
Restriction(s): Registration is limited to students registered in the Art History or Studio Art specializations with an average of 70% in all ARTH and SART course attempts.
Department(s): School of Fine Art and Music
### XII. Course Descriptions, Studio Art

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SART*4670</td>
<td>Topics in Experimental Studio F (0-6) [0.50]</td>
<td>This course offers some directed projects, but also provides students with the opportunity to generate, sustain, and complete a self-directed body of work. Students will explore various approaches to historical and contemporary modes of photography, with an emphasis on experimental, hybrid, and material-based approaches to the medium. An emphasis will be placed on conceptual development, exploring the interaction of formal and representational concerns within the practice of photography. Prerequisite(s): SART*3770</td>
</tr>
</tbody>
</table>
### Theatre Studies

**School of English and Theatre Studies**

**NOTES:** Admission to the following courses is not guaranteed, and is by audition, submission of a portfolio and/or interview only:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Offered In</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>THST*2270</td>
<td>Theatre Research II W (3-0) [0.50]</td>
<td>This variable content course will introduce students to aspects of the practice of scholarly research in relation to theatre studies. Students will be encouraged to consider resources and materials available to scholars of theatre and be introduced to the conventions of scholarly writing in theatre studies.</td>
<td>THST*1270</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*2450</td>
<td>Approaches to Media Studies W (3-0) [0.50]</td>
<td>This course examines major approaches to the study of communication, including cybernetic, anthropological, semiotic and other perspectives, focusing on how people transmit information and construct meaning.</td>
<td>THST*1200</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*2500</td>
<td>Contemporary Cinema W (3-5) [0.50]</td>
<td>The course is designed to give the student knowledge and understanding of contemporary cinematic expression.</td>
<td>DRMA*2500</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*2650</td>
<td>History of Communication F (3-0) [0.50]</td>
<td>This course is organized around several revolutions in communication and technology: the evolution of human language; the development of writing systems and literacy; the invention and spread of printing and typography; and the beginnings of electronic communication and the digital revolution.</td>
<td>THST*2190</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*3000</td>
<td>Experiential Learning S,F,W (3-0) [0.50]</td>
<td>Under the supervision of a faculty member, students in this course will be placed in experiential learning situations at the university or in the wider community where they will support a community or academic project. Students will be required to become familiar with the goals and procedures of the project, to frame and articulate learning objectives, and to express in writing their learning outcomes. Depending on the placement, a police record check may be required in order to placed. Please consult with the Theatre Studies website for further information on experiential learning opportunities.</td>
<td>THST<em>2050, THST</em>2190</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*3010</td>
<td>Experiential Learning S,F,W (3-0) [0.50]</td>
<td>Under the supervision of a faculty member, students in this course will be placed in experiential learning situations at the university or in the wider community where they will support a community or academic project. Students will be required to become familiar with the goals and procedures of the project, to frame and articulate learning objectives, and to express in writing their learning outcomes. Depending on the placement, a police record check may be required in order to placed. Please consult with the Theatre Studies website for further information on experiential learning opportunities.</td>
<td>THST<em>2050, THST</em>2190</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*3140</td>
<td>Performance and the Past W (3-0) [0.50]</td>
<td>This variable content course focuses on a selected area of theatre history. Students will be encouraged to integrate primary and secondary materials in a presentation of research findings which may take a range of forms including an essay, media or theatrical presentation.</td>
<td>THST*1200</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Offered In</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>THST*1040</td>
<td>Introduction to Performance F,W (3-0) [0.50]</td>
<td>This course functions as a foundation for the study of theatre, performance, and media. Students will be introduced to the formative terms and theories of theatre, performance, and media as an academic discipline and to the conceptual and social terms of theatre and media as cultural practices. This course includes attendance at performances.</td>
<td>THST*1100</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*1190</td>
<td>Theatre Workshop I W (3-2) [0.50]</td>
<td>This course provides a fundamental introduction to the processes of theatrical production, with practical application and study of the analytic, creative and technical skills that bring an idea to life on the stage. Students will learn how to analyze a play script from the perspective of the director, actor, designer and technician and will also be introduced to the fundamentals of theatre technology, scene study and production decision-making.</td>
<td>THST*1150</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*1200</td>
<td>The Languages of Media F (3-2) [0.50]</td>
<td>This introductory course examines film, radio, television, and digital media, focusing on the codes and conventions used by different media to create relationships between structure and content, to make meaning.</td>
<td>THST*2080</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*1270</td>
<td>Theatre Research I W (3-0) [0.50]</td>
<td>This course introduces students to scholarly research and writing in the discipline of Theatre Studies through variable-topic theoretical inquiry and secondary research. Emphasis will be placed on the application of theory to analysis, the use of evidence, the development a research question and the practice of scholarly writing.</td>
<td>THST*1150</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*2050</td>
<td>Devising W (2-3) [0.50]</td>
<td>This course introduces students to the play creation techniques of devising, in which the script is generated collaboratively by the creative team (performers, directors, designers and dramaturges) in the rehearsal process. Students work collaboratively on demonstration exercises including physicalization, visualization, improvisation, and scripting, culminating in rehearsing and performing original material. Significant attention is paid to creative and collaborative problem solving in this studio course.</td>
<td>THST<em>1040, THST</em>1190</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*2120</td>
<td>Writing for Performance F (3-0) [0.50]</td>
<td>This course is a theoretical and applied study of creative writing for performance.</td>
<td>THST*1200</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
<tr>
<td>THST*2190</td>
<td>Theatre Workshop II F (3-2) [1.00]</td>
<td>This course is an intensive study of the methods of theatrical production, organized around a creative project. Students will rotate through modules focusing on skill development in the areas of acting, design, costumes, sets, lights, sound, media and stage management. Depending on the scale of the production and the class size, this course may be co-taught with Theatre Workshop III. Students in the course may undertake performance or production roles in a public performance.</td>
<td>THST<em>1040, THST</em>1190</td>
<td>School of English and Theatre Studies</td>
<td></td>
</tr>
</tbody>
</table>
THST*3170 Special Topics F (3-0) [0.50]

This course provides students with the opportunity to work intensively in an area of theatre work in a project defined by faculty research. The material and topic will vary but the course will consistently engage with an area of creative practice, such as scenography and design, directing, acting studio or playwriting. This course may be offered as a performance-centered studio, a design studio workshop, or a playwriting seminar, depending on the instructor. Consult the Theatre Studies website for more information on a specific iteration of the course.

Prerequisite(s): 7.50 credits, including THST*2270
Restriction(s): THST*3540, THST*3550, THST*3620, THST*3650, THST*3660, THST*3850 Restricted to students in a Theatre Studies specialization.
Department(s): School of English and Theatre Studies

THST*3190 Theatre Workshop III F (3-2) [1.00]

Students in this course will undertake the design, technical production and performance of a fully realized theatrical production. All production assignments (cast, technical crews, front of house, dramaturgy, assistant director, assistant designer) will be drawn from students enrolled in the course and in cooperation with senior students enrolled in THST*4500. The course will be taught as a workshop in skill-specific modules, out-of-class rehearsals, and technical training crew calls. Depending on the scale of the production and the class enrolments, this course may be co-taught with THST*2190.

Prerequisite(s): 7.50 credits, including THST*2190
Restriction(s): THST*3080, THST*3110, THST*3120, THST*3220, THST*3230 Restricted to students in a Theatre Studies specialization.
Department(s): School of English and Theatre Studies

THST*3260 Shakespeare: Text & Performance S (3-0) [0.50]

This course offers an analysis of a selection of plays by William Shakespeare. In addition to textual analysis, the students will be introduced to the stage history of the plays being considered, with attention to conditions of production. The course normally will include consideration of plays by Shakespeare which are currently in production at the Stratford Festival; students will have the opportunity to see the plays in performance for which an additional fee may be charged. The course is taught as an intensive seminar in conjunction with the Stratford Festival and is offered in Stratford, Ontario. This course features variable content. Please consult the Theatre Studies website for more information.

Prerequisite(s): 2.50 credits in Theatre Studies including (1 of THST*2010, THST*3140, 1.00 credits in English)
Department(s): School of English and Theatre Studies

THST*3340 Voice and Text in Performance S (6-6) [0.50]

Within a studio context, students are introduced to techniques of voice, particularly in relation to performing verse. The course is taught as an intensive lab in conjunction with the Stratford Festival and is offered in Stratford, Ontario. The course may involve a lab fee. Admission to the course is by application to the School of English and Theatre Studies. Further information is available from the School.

Prerequisite(s): 2.50 credits in Theatre Studies including (1 of THST*3080, THST*3110, THST*3190)
Co-requisite(s): THST*3260
Restriction(s): Instructor consent required.
Department(s): School of English and Theatre Studies

THST*3500 Performance Praxis I W (3-2) [0.50]

Students will collaborate in the exploration of theory and creative practice in a project-based course. The projects may be theatrical or media-based, or an integration of both depending on the iteration of the course. Please consult the Theatre Studies website for more information.

Prerequisite(s): THST*2050, THST*2270
Restriction(s): THST*3340, THST*3460, THST*3480, THST*3550, THST*3700 Restricted to students in a Theatre Studies major or minor.
Department(s): School of English and Theatre Studies

THST*3530 Canadian Cinema F (2-3) [0.50]

This course is designed to give the student knowledge and understanding of Canadian film and film makers.

Offering(s): Offered in even-numbered years.
Prerequisite(s): 7.50 credits
Department(s): School of English and Theatre Studies

THST*3600 Directed Readings U (3-0) [0.50]

This course provides Independent study opportunities based upon bibliographies established in consultation with the instructor. An essay will normally constitute the written requirement for the course. Tutoring and/or consultation will be arranged, depending on the topic or materials for study. Projects for this course are subject to the approval of the School, and must be submitted to the Director, on forms provided by the School, no later than the last day of classes in the semester prior to enrolment in the course.

Prerequisite(s): 3.00 credits in Theatre Studies including ([ THST*2010, THST*2230 ) or (THST*3140, THST*2190)], (1 of THST*2050, THST*2080, THST*2120, THST*2240)
Restriction(s): Instructor consent required.
Department(s): School of English and Theatre Studies

THST*3630 Special Studies in Studio Practice U (3-0) [0.50]

The course provides an intensive exploration of one aspect of studio practice: playwriting, acting, design or technical theatre.

Prerequisite(s): 3.00 credits in Theatre Studies including one of the following, as appropriate to the topic of the course: THST*2080, THST*2120, THST*2230, THST*2240.
Equate(s): DRMA*3630
Restriction(s): Instructor consent required.
Department(s): School of English and Theatre Studies

THST*3950 Drama in London U (2-4) [0.50]

This course is designed for students taking the London Semester consisting of a study of theatre events in London, through attending performances, reading texts and meeting for weekly seminars.

Equate(s): DRMA*3950
Restriction(s): Permission of the Co-ordinator of the London Semester.
Department(s): School of English and Theatre Studies

THST*4240 Theatrical Organization and Culture F (3-0) [0.50]

This course studies various models of theatrical organization such as social context, theatrical funding, board and management structures, and artistic mandates together with their implications for theatrical production and interpretation.

Prerequisite(s): 10.00 credits including 1.00 credits in Theatre Studies.
Restriction(s): THST*3240
Department(s): School of English and Theatre Studies

THST*4270 Research Seminar I F (3-0) [0.50]

This course is a research seminar in selected topics in media, theatre and performance. The course features variable content. Please consult the Theatre Studies website for more information.

Prerequisite(s): 10.00 credits, including (1 of THST*2270, THST*3140, THST*3550, THST*3650, THST*3660)
Restriction(s): THST*4320, Restricted to students in a Theatre Studies specialization, with an average of 70% in the specialization.
Department(s): School of English and Theatre Studies

THST*4280 Ensemble Project W (6-9) [1.00]

This course provides Independent study opportunities based upon bibliographies established in consultation with the instructor. An essay will normally constitute the written requirement for the course. Tutoring and/or consultation will be arranged, depending on the topic or materials for study. Projects for this course are subject to the approval of the School, and must be submitted to the Director, on forms provided by the School, no later than the last day of classes in the semester prior to enrolment in the course.

Prerequisite(s): THST*2010, THST*2230, THST*2240, THST*3140, THST*3550, THST*3580, THST*3650, THST*3660
Restriction(s): Restricted to majors in Theatre Studies who have completed a minimum of 14.00 credits with 70% cumulative average in Theatre Studies.
Department(s): School of English and Theatre Studies

THST*4290 Research Seminar II W (3-0) [0.50]

This is an advanced research seminar in selected topics in media, theatre and performance. The course features variable content. Please consult the Theatre Studies website for more information.

Prerequisite(s): 10.00 credits, including THST*4270
Restriction(s): THST*4330, Restricted to students in a Theatre Studies specialization with an average of 70% in the specialization.
Department(s): School of English and Theatre Studies
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>THST*4500</td>
<td>Performance Praxis II W (3-2) [1.00]</td>
<td>This course provides students with applied leadership roles in capacities such as stage managers, assistant directors, assistant designers or dramaturges and leads to a culminating public production. Students will also study the functions of these roles in production and performance. Admission is by application to the School. Refer to the Theatre Studies website for more information.</td>
<td>THST*3500</td>
<td>THST<em>3410 , THST</em>3420 , THST*4250 Restricted to students in a Theatre Studies major or minor. Instructor consent required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>School of English and Theatre Studies</td>
</tr>
<tr>
<td>THST*4650</td>
<td>Honours Essay U (3-0) [0.50]</td>
<td>The completion, under direction, of a scholarly essay in the study of drama and/or theatre. Admission is by application to the instructor.</td>
<td>[( THST<em>3650 or THST</em>3660 ), THST<em>3550 , THST</em>3850 ] or (THST<em>3170 or THST</em>4270)</td>
<td>Instructor consent required. 70% cumulative average in Theatre Studies courses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>School of English and Theatre Studies</td>
</tr>
</tbody>
</table>
### Toxicology

**Department of Biomedical Sciences**

**Department of Chemistry**

**School of Environmental Sciences**

**Department of Mathematics and Statistics**

**Department of Molecular and Cellular Biology**

**Department of Pathobiology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Type</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOX*2000</strong></td>
<td>Principles of Toxicology F (3-0) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This course will establish the scientific principles underlying the toxic actions of various substances and will introduce the various challenges within the field of toxicology. The chemical nature of injurious substances, their uptake and metabolism by non-target organisms, and their mode of toxic action will be studied in addition to the methods used in safety evaluations and risk assessment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CHEM<em>1050, (1 of IPS</em>1500, MATH<em>1080, MATH</em>1200), (1 of BIOL<em>1040, BIOL</em>1070, BIOL<em>1080, BIOL</em>1090)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Type</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOX*3300</strong></td>
<td>Analytical Toxicology F (3-3) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A course in trace analysis designed for students in toxicology and related programs. Analytical techniques of value in analyzing samples of toxicological importance will be presented with emphasis also on sample collection and preparation prior to analysis.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Department of Chemistry</strong></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CHEM<em>2480, BIOC</em>2580, TOX<em>2000 (TOX</em>2000 may be taken concurrently)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Restriction(s):</strong></td>
<td>CHEM*3430, This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Type</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOX*3360</strong></td>
<td>Environmental Chemistry and Toxicology S,W (3-0) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This course examines the chemistry of the natural environment and the influence of pollutants upon the environment. Topics will include methods of introduction of pollutants to, and removal of pollutants from, the environment. (Also listed as CHEM*3360.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Department of Chemistry</strong></td>
</tr>
<tr>
<td><strong>Offering(s):</strong></td>
<td>Also offered through Distance Education format.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>CHEM*1050</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equates:</strong></td>
<td>CHEM*3360</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>Department of Chemistry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Type</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOX*4000</strong></td>
<td>Medical Toxicology F (3-0) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This course will focus on the toxicology of mammalian body systems with emphasis on dose-response, mechanisms and the sites of action of major groups of chemical toxicants and biological toxins. The course is designed for students majoring in Bio-Medical Sciences, Biomedical Toxicology and Toxicology.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Department of Biomedical Sciences</strong></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>BIOM*3090</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Restriction(s):</strong></td>
<td>This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Type</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOX*4100</strong></td>
<td>Toxicological Pathology W (2-2) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation of the pathologic responses of cells and tissues to toxic compounds. The course is designed for students majoring in toxicology.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Department of Pathobiology</strong></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>PATH*3610 (or equivalent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>Department of Pathobiology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Type</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOX*4200</strong></td>
<td>Topics in Toxicology W (3-0) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topics in toxicology will consist of oral and written presentations by students, faculty members, and guest lecturers. The emphasis will be on the broad integrative aspects of toxicology with particular reference to the whole organism and higher levels of natural systems; risk assessment and regulatory toxicology.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Department of Pathobiology</strong></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>TOX<em>2000, TOX</em>3300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Restriction(s):</strong></td>
<td>Restricted to students in BSCH.TOX, BSCH.TOX:C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department(s):</strong></td>
<td>Department of Pathobiology, School of Environmental Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Type</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOX*4590</strong></td>
<td>Biochemical Toxicology F (3-0) [0.50]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This course will focus on the biotransformation of drugs, carcinogens, and other toxicants, including consideration of human health implications of these metabolic processes. The enzymes catalyzing these reactions will be discussed in detail.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Department of Chemistry</strong></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>(1 of BIOC<em>3570, CHEM</em>3430, TOX<em>3300), BIOC</em>3560, (MBG<em>2020 or MBG</em>2040)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Type</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOX*4900</strong></td>
<td>Toxicology Research Project I S,F,W (0-9) [1.00]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This research project in toxicology is designed to provide senior undergraduate students with an opportunity to conduct research in an area of toxicology. Students should note that most projects are of two semesters' duration, and should plan their studies with the expectation that they will also register in TOX*4910 in a subsequent semester. Students must make arrangements with both the faculty supervisor and the course coordinator at least one semester in advance. The project supervisor should normally be a faculty member from the Toxicology Program.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Department of Chemistry</strong></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>TOX*3300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Restriction(s):</strong></td>
<td>Normally a minimum cumulative average of 70% is required. Instructor consent required.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Type</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Restriction(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOX*4910</strong></td>
<td>Toxicology Research Project II S,F,W (0-9) [1.00]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This course involves a research project in toxicology. Students must make arrangements with both the faculty supervisor and the course coordinator at least one semester in advance. The project supervisor should normally be a faculty member from the Toxicology Program.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Department of Chemistry</strong></td>
</tr>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>TOX*4900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Restriction(s):</strong></td>
<td>Normally a minimum cumulative average of 70% is required. Instructor consent required.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Veterinary Medicine**

*Department of Biomedical Sciences*
*Department of Clinical Studies*
*Department of Pathobiology*
*Department of Population Medicine*

The hours in courses below indicate the approximate equivalent number of semester course hours.

These courses will be available only to students registered in the D.V.M. program.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Department(s)</th>
<th>Co-requisite(s)</th>
<th>Prerequisite(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VETM*3070</td>
<td>Veterinary Anatomy P1 (2-6) [2.00]</td>
<td>Department of Biomedical Sciences</td>
<td>All Phase 1 courses.</td>
<td></td>
</tr>
<tr>
<td>VETM*3080</td>
<td>Veterinary Physiology and Biochemistry P1 (3-3) [2.00]</td>
<td>Department of Biomedical Sciences, Department of Pathobiology</td>
<td>All Phase 1 courses.</td>
<td></td>
</tr>
<tr>
<td>VETM*3120</td>
<td>Veterinary Histology and General Pathology P1 (3-3) [0.75]</td>
<td>Department of Biomedical Sciences, Department of Pathobiology</td>
<td>All Phase 1 courses.</td>
<td></td>
</tr>
<tr>
<td>VETM*3210</td>
<td>Art of Veterinary Medicine I P1 (V-V) [0.50]</td>
<td>Department of Biomedical Sciences, Department of Pathobiology</td>
<td>All Phase 1 courses.</td>
<td></td>
</tr>
<tr>
<td>VETM*3220</td>
<td>Art of Veterinary Medicine II P2 (2-0) [0.50]</td>
<td>Department of Biomedical Sciences, Department of Pathobiology</td>
<td>All Phase 2 courses.</td>
<td></td>
</tr>
<tr>
<td>VETM*3390</td>
<td>Developmental Biology P1 (1-1) [0.50]</td>
<td>Department of Biomedical Sciences</td>
<td>All Phase 1 courses.</td>
<td></td>
</tr>
<tr>
<td>VETM*3400</td>
<td>Health Management I P1 (3-1) [0.75]</td>
<td>Department of Population Medicine</td>
<td>All Phase 1 courses.</td>
<td></td>
</tr>
<tr>
<td>VETM*3410</td>
<td>Health Management II P2 (3-0) [0.75]</td>
<td>Department of Population Medicine</td>
<td>All Phase 2 courses.</td>
<td></td>
</tr>
<tr>
<td>VETM*3430</td>
<td>Clinical Medicine I P1 (V-V) [0.25]</td>
<td>Department of Clinical Studies</td>
<td>All Phase 1 courses.</td>
<td></td>
</tr>
<tr>
<td>VETM*3440</td>
<td>Clinical Medicine II P2 (0-2) [0.50]</td>
<td>Department of Clinical Studies</td>
<td>All Phase 2 courses.</td>
<td></td>
</tr>
<tr>
<td>VETM*3450</td>
<td>Principles of Disease in Veterinary Medicine P2 (V-V) [2.75]</td>
<td>Department of Biomedical Sciences, Department of Pathobiology</td>
<td>All Phase 2 courses.</td>
<td></td>
</tr>
</tbody>
</table>
XI. Course Descriptions, Veterinary Medicine

VETM*3460 Theriogenology P2 (V-V) [0.75]
A lecture and laboratory course covering the normal and abnormal reproductive systems of domestic animals. The course will include mammalian reproductive physiology and histology, diagnosis and treatment of reproductive disorders, including infertility, and management of breeding programs of the common domestic species. An introduction to the new reproductive technologies used in theriogenology will also be provided.

Prerequisite(s): All Phase 1 courses.
Co-requisite(s): All Phase 2 courses.
Department(s): Department of Biomedical Sciences, Department of Population Medicine

VETM*3470 Anaesthesiology and Pharmacology P2 (V-V) [0.75]
This course provides the general principles, pharmacologic basis, and practical applications of general and local anaesthesia in small and large animals. Other topics covered include fluid and acid-base imbalance and the prevention and treatment of surgical shock.

Prerequisite(s): All Phase 1 courses.
Co-requisite(s): All Phase 2 courses.
Department(s): Department of Biomedical Sciences, Department of Clinical Studies

VETM*3510 Principles of Surgery P2 (2-0) [0.25]
The principles of surgery in various animal species are given. The lecture topics include patient and surgeon preparation, tissue handling instrumentation, suturing and surgical principles and approaches to various organ systems and anatomical regions.

Prerequisite(s): All Phase 1 courses.
Co-requisite(s): All Phase 2 courses.
Department(s): Department of Clinical Studies

VETM*4220 Art of Veterinary Medicine III P3 (2-0) [0.50]
This modular course will require students to apply the knowledge and skills acquired in Phases 1 and 2 to problems that incorporate aspects of one or more of the following areas: communications and conflict resolution, ethics, professional behaviour, human-animal interactions, analysis and planning, and business issues. This course will focus on methods to resolve difficulties in the above areas that are interfering with intrapersonal and interpersonal relationships and with how to return abnormal situations to normal ones. Problem-solving, conflict resolution and stress management through application of innate and acquired knowledge and skills will be expected. The course will be taught primarily through case analysis.

Prerequisite(s): All Phase 2 courses.
Co-requisite(s): All Phase 3 courses.
Department(s): Dean’s Office, Ontario Veterinary College, Department of Population Medicine, Veterinary Teaching Hospital

VETM*4420 Clinical Pharmacology P3 (V-V) [0.25]
This course stresses rational drug therapy through an understanding of drug factors, host factors and disease factors, with emphasis on clinically relevant properties of selected major drug classes and used for therapy (prevention and treatment) in small animals, food animals, and horses.

Prerequisite(s): All Phase 2 courses.
Co-requisite(s): All Phase 3 courses.
Restriction(s): Registration in the D.V.M. Program
Department(s): Department of Biomedical Sciences

VETM*4450 Equine Medicine and Surgery P3 (3-0) [0.50]
The course will contribute to students' achievement of selected DVM 2000 elements of competency in the context of the horse. The primary emphasis is directed towards developing the skills, knowledge and attitudes that will permit the entry-level veterinarian to develop strategies to deal with common and uncommon diagnoses.

Prerequisite(s): All Phase 2 courses.
Co-requisite(s): All Phase 3 courses.
Department(s): Department of Clinical Studies

VETM*4460 Food Animal Medicine and Surgery P3 (V-V) [1.00]
The course will contribute to students' achievement of selected DVM 2000 elements of competency in the context of the common ruminant species and swine. The primary emphasis is directed towards developing the skills, knowledge and attitudes that will permit the entry-level veterinarian to develop strategies to deal with common and uncommon diagnoses. The graduating competencies can be found on the OVC website (http://www.ovcnet.uoguelph.ca/homepage/html).

Prerequisite(s): All Phase 2 courses.
Co-requisite(s): All Phase 3 courses.
Department(s): Department of Clinical Studies, Department of Population Medicine

VETM*4470 Medicine and Surgery of Dog and Cat P3 (V-V) [1.00]
The course will contribute to students' achievement of selected DVM 2000 elements of competency in the context of the dog and cat. The primary emphasis is directed towards developing the skills, knowledge and attitudes that will permit the entry-level veterinarian to develop strategies to deal with common and uncommon diagnoses. The graduating competencies can be found on the OVC website (http://www.ovcnet.uoguelph.ca/homepage/html).

Prerequisite(s): All Phase 2 courses.
Co-requisite(s): All Phase 3 courses.
Department(s): Department of Clinical Studies

VETM*4480 Comparative Medicine P3 (V-V) [0.75]
The course will contribute to students' achievement of selected elements of graduating competency in the context of pet birds, commercial poultry and non-traditional species (fish, amphibians, reptiles, rabbits, rodents, ferrets, non-domestic carnivores and non-domestic ungulates). The primary emphasis is directed towards enhancing the skills, knowledge and attitudes that will permit the entry-level veterinarian to develop strategies to deal with common and uncommon diagnoses. The graduating competencies can be found on the OVC website (http://www.ovcnet.uoguelph.ca/homepage/html).

Prerequisite(s): All Phase 2 courses.
Co-requisite(s): All Phase 3 courses.
Department(s): Department of Pathobiology

VETM*4490 Systems Pathology P3 (V-V) [1.00]
The course will contribute to students' achievement of selected elements of graduating competency in the context of pathology across the range of species. The primary emphasis is directed towards developing the skills, knowledge and attitudes that will permit the entry-level veterinarian to carry out the post-mortem examinations, select and perform relevant ancillary diagnostic tests and procedures, interpret findings, and initiate and interpret results of further investigations. The graduating competencies can be found on the OVC website (http://www.ovcnet.uoguelph.ca/homepage/html).

Prerequisite(s): All Phase 2 courses.
Co-requisite(s): All Phase 3 courses.
Department(s): Department of Pathobiology

VETM*4530 Health Management III P3 (V-V) [0.50]
The course will contribute to students' achievement of greater depth in selected elements of graduating competency in the context of health management in species of their choice. The primary emphasis is directed towards developing species-specific skills, knowledge and attitudes that will permit the entry-level veterinarian to assess and advise on animal production and performance and evaluate the necessity for, and implementation of, health management programs. The course is constructed of a series of species-based modules. Students will be required to take two of the modules. The graduating competencies can be found on the OVC website (http://www.ovcnet.uoguelph.ca/homepage/html).

Prerequisite(s): All Phase 2 courses.
Co-requisite(s): All Phase 3 courses.
Department(s): Department of Population Medicine

VETM*4540 Surgical Exercises P3 (V-V) [1.75]
Veterinary students receive training in preoperative planning, anaesthesia and surgical techniques, operative room decision making and post-operative care in this laboratory course. Students begin by practicing technical skills on inanimate models. They progress to performing a series of supervised operations designed to parallel the most commonly performed surgeries in private practice. A once weekly rounds period allows discussion of issues arising from the previous anaesthesia and surgery, and planning for the upcoming laboratory. Though some didactic material is presented, the course is mainly experiential. The evaluation outcome of the course is outstanding, pass or fail.

Prerequisite(s): All Phase 2 courses.
Co-requisite(s): All Phase 3 courses.
Restriction(s): Registration in the D.V.M. Program
Department(s): Department of Population Medicine

VETM*4610 Small Animal Stream P4 (V-V) [7.50]
This course is for students who have selected the Small Animal Stream in Phase 4 of the DVM Program. The goal of the small animal stream course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process where students progress through 30 weeks of core and elective rotations that provide applied learning experiences in the context of veterinary medicine.

Prerequisite(s): All Phase 3 courses.
Co-requisite(s): VETM*4900
Restriction(s): Registration in the DVM program.
Department(s): Dean’s Office, Ontario Veterinary College
### VETM*4660 Rural Community Practice Stream P4 (V-V) [7.50]

This course is for students who have selected the Rural Community Practice Stream in Phase 4 of the DVM Program. The goal of the rural community practice stream course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process where students progress through 30 weeks of core and elective rotations that provide applied learning experiences in the context of veterinary medicine.

**Prerequisite(s):** All Phase 3 courses.

**Co-requisite(s):** VETM*4900

**Restriction(s):** Registration in the DVM program.

**Department(s):** Dean's Office, Ontario Veterinary College

### VETM*4710 Food Animal Stream P4 (V-V) [7.50]

This course is for students who have selected the Food Animal Stream in Phase 4 of the DVM Program. The goal of the food animal stream course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process where students progress through 30 weeks of core and elective rotations that provide applied learning experiences in the context of veterinary medicine.

**Prerequisite(s):** All Phase 3 courses.

**Co-requisite(s):** VETM*4900

**Restriction(s):** Registration in the DVM program.

**Department(s):** Dean's Office, Ontario Veterinary College

### VETM*4870 Clinical Medicine III P3 (0-2) [0.25]

This course will contribute to students' achievement of selected DVM 2000 elements of competency in the context of the hospital environment. This is an integrated course in which students will enhance a variety of clinical skills, including physical examination, history taking, problem solving, and ancillary diagnostic tests and procedures. This course is primarily carried out in the Veterinary Teaching Hospital where students will be exposed to case material from the Large and Small Animal Clinics. The emphasis is directed towards enhancing the skills, knowledge and attitudes that will permit the student to maximize the benefit to be derived from senior year courses.

**Prerequisite(s):** All Phase 2 courses.

**Co-requisite(s):** All Phase 3 courses.

**Department(s):** Department of Clinical Studies

### VETM*4900 Veterinary Externship P4 (0-0) [2.50]

This is an eight-week experiential learning opportunity that junior students in the DVM Program must organize by the mid-way through Phase 3. The externship must be in approved private, primary care, veterinary practice. Senior students in the DVM Program, under the supervision of a designated host veterinarian, will experience being part of a team providing health care services to the public. This course will provide students with the opportunity to integrate and apply their knowledge and experience from previous courses, and further refine their problem-solving and communication skills, and enhance their ability to work as part of a team. The evaluation outcome of this course is outstanding, pass or fail.

**Prerequisite(s):** All Phase 1, Phase 2 and Phase 3 courses.

**Department(s):** Department of Clinical Studies

### VETM*4920 Equine Stream P4 (V-V) [7.50]

This course is for students who have selected the Equine Stream in Phase 4 of the DVM Program. The goal of the equine stream course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process where students progress through 30 weeks of core and elective rotations that provide applied learning experiences in the context of veterinary medicine.

**Prerequisite(s):** All Phase 3 courses.

**Co-requisite(s):** VETM*4900

**Restriction(s):** Registration in the DVM program.

**Department(s):** Dean's Office, Ontario Veterinary College
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Offering(s)</th>
<th>Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMST*1000</td>
<td>Introduction to Women's Studies S,F (3-0) [0.50]</td>
<td>An introduction to the methods and analyses of Women's Studies. An interdisciplinary feminist and multicultural examination of research about women and the gendered nature of societies and cultures. Areas of inquiry may include psychology, law, science, culture, work, family, violence, health, and sexuality.</td>
<td>Also offered through Distance Education format.</td>
<td>Dean's Office, College of Arts</td>
</tr>
<tr>
<td>WMST*2000</td>
<td>Women and Representation W (3-0) [0.50]</td>
<td>An interdisciplinary analysis of the role gender plays in representation, drawing on areas such as television, film, music, literature, visual arts, ethnography, medicine and law. International and cross-cultural perspectives included.</td>
<td></td>
<td>Dean's Office, College of Arts</td>
</tr>
</tbody>
</table>
ZOO*2090 Vertebrate Structure and Function F (3-3) [0.50]
This course offers a comparative survey of the structure and functioning of the chordates with emphasis on the vertebrates and includes a laboratory study of the anatomy of selected vertebrates.
**Prerequisite(s):** 4.00 credits including BIOL*1070
**Department(s):** Department of Integrative Biology

ZOO*2700 Invertebrate Morphology & Evolution W (3-3) [0.50]
This course examines the vast diversity of invertebrate taxa and the tools and concepts used to classify them and understand their origins. Principles of zoogeography, phylogeny, natural selection and comparative analyses will form the conceptual backbone of the course. In lectures and labs, students will ‘climb’ the tree of life, from the most ancient pre-invertebrates to more derived forms, and explore their anatomical and morphological diversity.
**Prerequisite(s):** 4.00 credits including BIOL*1070
**Department(s):** Department of Integrative Biology

ZOO*3000 Comparative Histology F (3-3) [0.50]
This course provides an introduction to the microscopic structure of the major organ systems of the vertebrate body. Beginning with an examination of epithelial, connective, muscular, and nervous tissues, the course then examines the comparative histology of the circulatory, nervous, digestive, integumentary, respiratory, excretory, reproductive, endocrine, and sensory systems of vertebrates.
**Prerequisite(s):** ZOO*2090
**Department(s):** Department of Integrative Biology

ZOO*3050 Developmental Biology W (3-3) [0.50]
This course will focus on the development of vertebrates and invertebrates from fertilized egg to adult. It will examine fertilization, cell differentiation into tissues and organs, regulation of cell growth, and transmission of developmental information to the next generation. Throughout, the course will emphasize the evolutionary mechanisms that have shaped developmental patterns in animals.
**Prerequisite(s):** MBG*2040, BIOL*2400 is strongly recommended.
**Department(s):** Department of Integrative Biology

ZOO*3600 Comparative Animal Physiology I F (3-0) [0.50]
This course will examine the physiological processes that enable animals to live within a diverse range of environments. Lectures will focus on the underlying molecular and cellular events that mediate physiological processes and contribute to whole animal homeostasis, and emphasize strategies and adaptations used by different animals when influenced by various environmental conditions. Fundamental mechanisms in animal physiology such as diffusion, osmosis, feedback systems, and homeostasis will be explored in nervous, muscular, endocrine and sensory physiological systems. An associated lab course (ZOO*3610) is available.
**Prerequisite(s):** BIOL*2580, ZOO*2090, (STAT*2040 or STAT*2230 is recommended)
**Department(s):** Department of Integrative Biology

ZOO*3610 Lab Studies in Animal Physiology I F (0-3) [0.25]
This hands-on laboratory course will provide practical experience in comparative animal physiology and complement themes covered in the lecture course (ZOO*3600). Students will learn skills and techniques used for conducting experiments on living animals with the goal of characterizing physiological processes. Students will learn how to collect data, statistically analyze results and write formal laboratory reports.
**Prerequisite(s):** STAT*2040 or STAT*2230
**Co-requisite(s):** ZOO*3600
**Department(s):** Department of Integrative Biology

ZOO*3620 Comparative Animal Physiology II W (3-0) [0.50]
This course will examine the physiological processes that enable animals to live within a diverse range of environments. With a focus on respiratory, cardiovascular, osmoregulatory and digestive physiological processes, the lectures will examine the underlying molecular and cellular events that mediate physiological processes and contribute to whole animal homeostasis. An associated lab course (ZOO*3630) is available.
**Prerequisite(s):** ZOO*3600
**Restriction(s):** ZOO*3210
**Department(s):** Department of Integrative Biology

ZOO*3630 Lab Studies in Animal Physiology II W (0-3) [0.25]
In this hands-on laboratory course, students will apply skills and techniques to conduct experiments on living animals with the goal of characterizing physiological processes. Students will advance their writing skills through preparation of several full lab reports. The last experiment in the course is a self-directed study where students will develop hypotheses, generate and test predictions and design the experiment using tools they have learned in the course.
**Prerequisite(s):** ZOO*3610
**Co-requisite(s):** ZOO*3620
**Restriction(s):** ZOO*3210
**Department(s):** Department of Integrative Biology

ZOO*3700 Integrative Biology of Invertebrates F (3-3) [0.50]
This course explores variation in physiology, reproduction and life history among invertebrates, and the role of invertebrates in marine, freshwater and terrestrial ecosystems. Through field experiences, lab study and a class experiment, we will examine the diverse solutions that invertebrates have evolved to live in very different environments, including: circulation and gas exchange; feeding and digestion; osmoregulation and excretion, nervous system and sensory structures; locomotion and biomechanics, and invertebrate communities.
**Prerequisite(s):** ZOO*2700
**Department(s):** Department of Integrative Biology

ZOO*4070 Animal Behaviour F (3-0) [0.50]
This course provides an introduction to the theories and principles of the behaviour of animals. It includes comparative studies of learning, socialization, social interaction, and other components of animal behaviour.
**Prerequisite(s):** BIOL*2400, (STAT*2040 or STAT*2230)
**Department(s):** Department of Integrative Biology

ZOO*4170 Experimental Comparative Animal Physiology W (3-3) [0.50]
In this course an experimental approach to the study of physiological mechanisms and adaptive responses to changes in the environment will be stressed. The focus of the course will be on laboratory exercises.
**Prerequisite(s):** 1 of BIOM*3200, HK*2810, ZOO*3210, ZOO*3600
**Department(s):** Department of Integrative Biology

ZOO*4300 Marine Biology and Oceanography F (3-3) [0.75]
This intensive two-week course is held in late August or early September before classes commence for the Fall semester. The course is held at the Huntsman Marine Science Centre, St. Andrews, New Brunswick. The ecology, behaviour, physiology, biochemistry, biomechanics of marine plants and animals will be studied as well as basic oceanographic techniques. Students will be able to familiarize themselves with the techniques and equipment involved in various branches of marine biology and oceanography. In addition, to regular tuition fees, students are responsible for the cost of transportation to St. Andrews, and for charges levied by the Huntsman Marine Science Centre for room and board. These fees are paid to Student Finance and Awards of the University of Guelph. A department application form must be submitted for approval before course selection. The signature of the course coordinator is required to select the course. This course must be recorded as part of your Fall course selection and tuition and compulsory fees will be calculated accordingly. Students taking this course DO NOT use course numbers reserved for Ontario Universities Program in Field Biology.
**Prerequisite(s):** BIOL*3450, ZOO*2700
**Department(s):** Department of Integrative Biology

ZOO*4330 Biology of Fishes W (2-3) [0.50]
This course provides a comparative examination of selected freshwater and marine fishes to illustrate the influence of aquatic environments on life styles, behavioral patterns, physiological responses, population biology and community structure. The use of niche, habitat and ecotone concepts in defining the role of fishes in representative types of aquatic ecosystems will be examined.
**Prerequisite(s):** 15.00 credits including (STAT*2040 or STAT*2230), ZOO*2090
**Department(s):** Department of Integrative Biology

ZOO*4570 Marine Ecological Processes W (3-1) [0.50]
This course provides an advanced analysis of the physical and biogeochemical processes in the world's oceans and the dependence of biological processes on physical and chemical processes from micro- to macro-scales. Topics to be discussed include production and energy transfer within pelagic food webs, export of energy to the benthos, and structure and dynamics of marine communities.
**Prerequisite(s):** BIOL*2060, BIOL*3450, PHYS*1080
**Department(s):** Department of Integrative Biology
### ZOO*4910 Integrative Vertebrate Biology F (3-0) [0.50]

This course examines the proximate and historical causes of diversity in morphology, physiology and behaviour among major groups of vertebrates (fishes, amphibians, reptiles, birds, mammals). First, topics such as vertebrate origins, zoogeography, taxonomy and comparative methods will be developed as a foundation for inquiry. The remainder of the course will be organized around specific contemporary problems in vertebrate biology such as the evolution of endothermy; feeding strategies and metabolism; locomotion and migration; trends in vertebrate reproduction; evolution of brain size and complexity in relation to cognition and communication. Each problem will be explored through analyses of taxonomic diversity, historical and phylogenetic constraints, physiological and developmental causes, and functional effects.

**Prerequisite(s):** BIOL*2400, ZOO*2090  
**Co-requisite(s):** ZOO*3600  
**Department(s):** Department of Integrative Biology

### ZOO*4920 Lab Studies in Ornithology F (0-3) [0.25]

This course provides a practical experience in the study of Ornithology. Using University collections of prepared and preserved specimens and field observations where possible, students will develop and apply skills in identification and sampling, explore relations between species diversity and habitat, and investigate, through guided study, the extent of anatomical, skeletal, reproductive and morphological variation and its functional and evolutionary causes.

**Prerequisite(s):** 14.00 credits including ZOO*2090  
**Restriction(s):** This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations or semester levels during certain periods. Please see the departmental website for more information. Instructor consent required.  
**Department(s):** Department of Integrative Biology

### ZOO*4940 Lab Studies in Herpetology W (0-3) [0.25]

This course provides a practical experience in the study of Herpetology. Using University collections of prepared and preserved specimens and field observations where possible, students will develop and apply skills in identification and sampling, explore relations between species diversity and habitat, and investigate through guided study, the extent of anatomical, skeletal, reproductive and morphological variation and its functional and evolutionary causes.

**Prerequisite(s):** 15.00 credits including ZOO*2090  
**Restriction(s):** This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations or semester levels during certain periods. Please see the departmental website for more information.  
**Department(s):** Department of Integrative Biology

### ZOO*4950 Lab Studies in Mammalogy W (0-3) [0.25]

This course provides a practical experience in the study of Mammalogy. Using University collections of prepared and preserved specimens and field observations where possible, students will develop and apply skills in identification and sampling, explore relations between species diversity and habitat, and investigate through guided study, the extent of anatomical, skeletal, reproductive and morphological variation and its functional and evolutionary causes.

**Prerequisite(s):** 15.00 credits including ZOO*2090  
**Restriction(s):** This is a Priority Access Course. Enrolment may be restricted to particular programs, specializations or semester levels during certain periods. Please see the departmental website for more information.  
**Department(s):** Department of Integrative Biology
XIII. Diploma Programs

For information about Associate Diploma Programs offered at the University of Guelph and Ridgetown Campus, please refer to the current Diploma Program Calendar. The current Diploma Program Calendar is available on [http://www.uoguelph.ca/diploma_calendar/](http://www.uoguelph.ca/diploma_calendar/).
XIV. General Information

Centre for International Programs

The Centre for International Programs, the first of its kind in Canada, aims to facilitate, stimulate and support a continuously growing range of University involvement in international activities. This goal is accomplished by developing and maintaining contacts with university partners around the world, supporting study abroad programs, and providing liaison with government agencies, private sector companies and non-governmental organizations. The Centre provides information on international opportunities and resources to students and faculty, and manages the University's student exchange programs. The Centre contributes to university policy on internationalization and serves as a focal point for links with other universities, government agencies, and private sector firms wishing to cooperate with the university in international activities.

Diversity and Human Rights

The Office of Diversity and Human Rights located at the north side of the campus at Fielding House, 15 University Avenue East. All enquiries are confidential. Office hours are Monday-Friday: 8:45a.m. - 4:45p.m. Phone: 824-4120, ext. 53000; Website: https://www.uoguelph.ca/diversity-human-rights/.

The Office of Diversity and Human Rights (DHR) is a welcoming, safe, and confidential resource for staff, students and faculty seeking information, training and support on issues relating to diversity, inclusion, equity, and human rights.

In accordance with the Ontario Human Rights Code, the University of Guelph’s Human Rights Policy and Procedures prohibit harassment or discrimination on the basis of: race, colour, ancestry, place of origin (where you were born), ethnic background, citizenship, creed (religion), sex (including pregnancy), disability, sexual orientation, gender expression, gender identity, age, marital status, and family status. In some cases, discrimination includes unfair treatment on the basis of the receipt of public assistance or a pardoned criminal offense.

These Policy and Procedures documents are available at the Diversity and Human Rights website https://www.uoguelph.ca/diversity-human-rights/

Definitions

Harassment is a course of comments or actions that are known, or ought reasonably to be known, to be unwelcome. It can involve words or actions that are known or should be known to be offensive, embarrassment, humiliating, demeaning or unwelcome, based on a ground of discrimination. (as identified in the preceding section.)

Discrimination refers to any form of unequal treatment based on a Code ground that results in disadvantage, whether imposing extra burdens or denying benefits. It may be intentional or unintentional. It may involve direct actions that are discriminatory on their face, or it may involve rules, practices or procedures that appear neutral, but have the effect of disadvantaging certain groups of people. It may be obvious, or it may occur in very subtle ways. Discrimination needs only to be one factor among many factors in a decision or action for a finding of discrimination to be made.

Inquiries and Complaints

All members of the University community (including students, staff and faculty) have the right to seek confidential advice and information about concerns or complaints regarding harassment or discrimination. DHR may assist individuals to resolve complaints by serving as a resource to the parties involved, providing mediation, or facilitating the University's human rights concern and complaint resolution procedures. In addition, any party may consult with DHR regarding any university decision which may relate to human rights.

Services

DHR delivers training and awareness on inclusion, equity, accessibility and human rights issues to all members of the University community; connects students, staff and faculty involved in human rights disputes with trained and independent support personnel; and in collaboration with university constituents, coordinates the university’s compliance with federal and provincial initiatives and legislation relating to human rights, equity, and accessibility.

Policy on Intellectual Property

The University of Guelph (the “University”) is one of the most research intensive universities in Canada, and has a long history of high-quality, innovative research that changes lives and improves life. The University is committed to enabling and supporting the people and partnerships that advance the quality, pre-eminence and societal value of the University’s research and creative endeavors.

It is recognized that in the course of research, new Intellectual Property will be created that may be commercially valuable and that may require patent or other protection in order to reach its full potential. Accordingly, the goal of this Policy is to encourage the creation of Intellectual Property and to facilitate its development and commercialization, while preserving the principles of academic and intellectual freedom.

No Personnel will be obliged to engage in the commercial exploitation of the results of their University Activities or to provide commercial justification for it, except as required in any grant application, award, or Contract.

The fundamental principle of this Policy is that, subject to the specific exceptions set out herein, Intellectual Property is owned by those who create it.

This Policy replaces the Inventions Policy (1991), the Copyright Policy (1989) and the Software Creation Policy (1989). It does not replace or supersede any other policy or collective agreement.

This Policy is effective as of May 1, 2014 and is not retroactive. This Policy applies to all Personnel.

Section 1: Definitions

1.1 “Commercialization” means the patenting, marketing, manufacturing, sale, distribution, licensing, sublicensing, transferring, granting of rights of use or leasing of Intellectual Property or products or services covered by, claimed by, or incorporating Intellectual Property.

1.2 “Contract” means a written agreement between the University and a Personnel and/or a third party. Contract shall also mean the terms or conditions under which funding is provided to the University to support the Personnel’s University Activities.

1.3 “Copyright” means the rights granted under the Copyright Act, RSC 1985, c.42, as amended from time to time.

1.4 “Creator” means the person or persons who creates, conceives, designs, discovers, develops, invents or authors Intellectual Property.

1.5 “Intellectual Property” means any result of intellectual or artistic activity and includes, but is not limited to Works, Tangible Research Property, software, databases and database layouts, Inventions, industrial or artistic designs, trade marks, trade names, domain names, integrated circuit topographies, know-how and trade secrets, whether or not registerable or registered under the law.

1.6 “Invention” means the rights associated with any patentable or potentially patentable idea, discovery or know-how and any associated or supporting technology that is required for development or application of the idea, discovery or know-how.

1.7 “Moral Rights” means the Canadian statutory rights of an author of a work in which Copyright subsists to be associated with the work and to prevent the distortion, mutilation or modification of the work to the prejudice of the honour and reputation of the author.

1.8 “Net Revenue” equal those gross receipts that the University is entitled to retain from Commercialization activity, less: (i) the University’s out-of-pocket costs and fees associated with securing, maintaining and enforcing intellectual property protection such as patenting and litigation expenses, (ii) out-of-pocket costs incurred by the University in the licensing of the intellectual property and (iii) any out-of-pocket expenses in making, shipping or otherwise distributing Tangible Research Property.

1.9 “Personnel” means one or more individuals carrying on the University Activities, paid or unpaid and who is are not a Member as defined in the Collective Agreement between the University of Guelph and the University of Guelph Faculty Association. Personnel include but are not limited to, Professor Emeriti, staff, students, sessional lecturers, post-doctoral fellows, volunteers and adjunct faculty. In the absence of a Contract governing new Intellectual Property created during their visit, visiting scientists and visiting students are considered Personnel for the purpose of this Policy.

1.10 “Principal Investigator” means the Personnel who is identified as principally responsible for the performance and supervision of research associated with a Contract.

1.11 “Tangible Research Property” means plant germplasm, cell lines, organisms, proteins, plasmids, DNA/RNA, chemical compounds, transgenic animals and other materials useful for research or for commercial purposes for which patent applications are not filed or, if filed, do not issue.

1.12 University Activities” means activities which are carried on by Personnel in the course of their employment or association with the University, or using University facilities, equipment, or other resources.

1.13 “Work” means original literary, dramatic, musical and artistic work and includes every original production in the literary, scientific or artistic domain, whatever maybe the mode or form of its expression such as websites, books, texts, articles, monographs, glossaries, bibliographies, cartographic materials, modular posters, study guides, laboratory manuals, correspondence course packages, interactive textbooks, course work delivered on the Internet, including distance education, multimedia instructional packages, syllabi, tests and work papers, lectures, musical and/or dramatic compositions, choreographic works, performers’ performances, unpublished scripts, films, filmstrips, charts, transparencies, other visual aids, video and audio tapes and cassettes, computer programs, live video and audio broadcasts, programmed instructional materials, drawings, paintings, sculptures, photographs, and other works of art.

Section 2: Copyright

1. Copyright belongs to Personnel who create Work, even if it is produced during the course of their University Activities, except in those cases where:

   a. there is a pre-existing Contract that assigns the ownership rights to the University or to a third party; or

   b. the Work is produced according to Section 2.2.

2. No Personnel shall claim any rights, and the University reserves to itself the ownership rights in any Works that are:
a. encompassed within section 2.1(a) above;
b. produced by Personnel at the specific request or direction of the University;
c. produced by Personnel employed for the express purpose of creating or producing Works, or where there is an explicit requirement in a Personnel’s job description for this responsibility;
d. an assessment, grading, report or correspondence produced pursuant to Personnel’s University Activities;
e. Works provided to a Personnel to assist him/her in carrying out his/her duties and modified by the Personnel, such as a laboratory manual; or
f. produced and designed to assist in the day-to-day administration of the University’s affairs.

3. Personnel shall not be required to waive their Moral Rights.

4. In the event that Work is the creation of more than one Personnel, the provisions of this Policy shall apply on a pro rata basis to all the Creators of the Work, unless a written agreement among the Creators, or a Contract states otherwise.

5. Where a Work is owned by a Personnel, Personnel may enter into an agreement with the University, at each party’s discretion, for the performance of commercialization activities such as evaluation, marketing and negotiation of licenses. The Creator(s) will be entitled to receive seventy-five percent (75%) of Net Revenues received by the University as a result of successful commercialization of a Work owned by a Personnel.

6. The University may, at any time, elect to terminate or relinquish its rights in any Work. In the event that the University or assignee relinquishes its rights in any Work, all Intellectual Property rights shall revert back to the Creator(s). In the event that any Creator is deceased, the rights shall revert to the estate of that Creator.

7. All Personnel who own Copyright pursuant to this Policy hereby grant to the University:
   a. a nonexclusive, royalty-free, irrevocable and non-transferable license to use such works in other, non-commercial teaching and/or scholarly, research or creative activities of the University, subject to copyright requirements of academic journals and other vehicles of scholarly publication; and
   b. in the case of written works submitted as partial fulfillment of the requirements for completing a degree at the University, the non-exclusive right to reproduce, translate, and/or distribute the written work worldwide in print and electronic format and in any medium, including but not limited to audio or video.

This license shall not apply to a Personnel’s personal documents, including unpublished lecture notes, course notes, lab notes or any work-in-progress.

Section 3: Inventions and Tangible Research Property

3.1 Inventions and Tangible Research Property belong to Personnel who create the Invention or Tangible Research Property, even if it is produced during the course of their University Activities, except in those cases where:
   a. there is a pre-existing Contract that assigns the ownership rights to the University or to a third party; or
   b. the Invention or Tangible Research Property is created according to Section 3.2.

3.2 No Personnel shall claim any ownership, and Personnel hereby assign ownership to the University in any Inventions or Tangible Research Property that is:
   a. encompassed within section 3.1(a) above;
   b. produced by Personnel at the specific request or direction of the University; or
   c. produced by Personnel employed for the express purpose of creating or producing Inventions or Tangible Research Property, or where there is an explicit requirement in a Personnel’s job description for this responsibility.

3.3 Prior to proceeding with a patent application or Commercialization activity, Personnel shall provide written disclosure to the University of any Invention made by him/her. Such disclosure shall assert whether ownership of the Invention is claimed by Personnel according to this Policy and the Personnel’s intention to pursue Commercialization independently or with the assistance of the University. If the University fails to challenge in writing the assertions of the Personnel within three (3) months of the receipt of disclosure of the Invention, the University shall be deemed to have accepted as accurate the assertions set out in the disclosure. Failure by a Personnel to disclose an Invention shall not terminate or waive any potential claim by the University regarding Intellectual Property rights.

3.4 Subject to section 3.3, where Personnel own an Invention or Tangible Research Property according to this Policy, they may, at their sole discretion, make arrangements for protection and Commercialization at their sole expense and benefit.

3.5 Where an Invention or Tangible Research Property is owned by Personnel, Personnel may enter into an agreement with the University, at each party’s discretion, for the performance of commercialization activities such as evaluation, patent protection, marketing and negotiation of licenses. The Creator(s) will be entitled to receive fifty percent (50%) of Net Revenues as a result of commercialization of an Invention or Tangible Research Property by the University.

3.6 Where an Invention is owned by the University, Personnel may enter into an agreement with the University, at each party’s discretion, for the performance of commercialization activities such as evaluation, patent protection, marketing and negotiation of licenses. The Creator(s) will be entitled to receive fifty percent (50%) of Net Revenues as a result of Commercialization of an Invention by University.

3.7 Where Tangible Research Property is owned by the University according to Section 3.2, University reserves to itself all ownership rights and revenues.

3.8 The University reserves to itself and Personnel shall grant a fully paid-up, non-exclusive, royalty-free, irrevocable and non-transferable license to use any Personnel-owned Invention or Tangible Research Property made, discovered or developed using the University’s facilities, support personnel, support services, equipment or materials, for academic and research purposes.

3.9 In the event that an Invention or Tangible Research Property is the creation of more than one Personnel, the provisions of this article apply on a pro rata basis to all the Creators unless a written agreement or Contract states otherwise.

3.10 The University may, at any time, elect to terminate or relinquish its rights in any Invention or Tangible Research Property. In the event that the University or any other assignee relinquishes its rights in any Invention, all Intellectual Property rights shall revert back to the Creator(s). In the event that any Creator is deceased, the rights shall revert to the estate of that Creator.

Section 4: Additional Items

4.1 The Principal Investigator has the duty to inform any collaborators or co-investigators, including all Personnel involved in the research, of the terms of any Contract governing the research, including terms related to ownership or Commercialization of Intellectual Property.

4.2 The name “University of Guelph” and abbreviations thereof, and the logos of the University of Guelph and their component parts, are trademarks and service marks of the University and are owned by the University. Personnel will take all reasonable and practicable steps to ensure that the name of the University and such other trade-marks and service marks are not used in connection with Intellectual Property without the prior written agreement of the University. No statement made by a Personnel with respect to Intellectual Property may, in any way, imply approval, promotion or use of such Intellectual Property by the University without the prior written agreement of the University. Notwithstanding the foregoing, nothing shall prevent Personnel from stating his/her employment, rank and title in connection with Intellectual Property.

4.3 This Policy is effective as of its implementation, and all Contracts between a Personnel and the University made prior to this date will be governed under the terms of those Contracts and the applicable policies in place at the time of the Contract.

4.4 Subject to Section 5, the Vice-President (Research) is responsible for making such determinations as are necessary under this Policy.

Section 5: Dispute Resolution

5.1 It is recognized that disputes may arise between the University and Personnel with respect to Intellectual Property and the implementation of this Policy. When disputes arise, every effort shall be made by all parties acting in good faith to resolve disputes at the lowest possible level.

5.2 If a dispute cannot be resolved informally, the matter will be referred to the Vice President (Research) (or his/her delegate), who will consult with others as appropriate and issue a written decision.

Section 6: Policy Review and Procedures

6.1 The Vice President (Research) is authorized to develop and up-date procedures to aid implementation of the Policy.

6.2 Amendments to the Policy require the approval of the Board.

6.3 The Board of Governors will review this Policy at least every five (5) years.

Policy on Non-Academic Misconduct

The University of Guelph's core value is the pursuit of truth. It is animated by a spirit of free and open enquiry, collaboration, and mutual respect. It asserts the fundamental equality of all human beings and is committed to creating for all members of its community, an environment that is hospitable, safe, supportive, equitable, pleasurable, and above all, free and open enquiry, collaboration, and mutual respect. It is recognized that disputes may arise between the University and Personnel with respect to Intellectual Property and the implementation of this Policy. When disputes arise, every effort shall be made by all parties acting in good faith to resolve disputes at the lowest possible level.

Failure to abide by these responsibilities may result in penalties. The University of Guelph has developed a policy that sets out the University’s expectations regarding conduct as members of the University of Guelph community. Please click onto the following to view the Policy on Non-Academic Misconduct: https://www.uoguelph.ca/secretariat/office-services/student-judicial-services/non-academic-misconduct/policy-non-academic-misconduct
XIV. General Information, Policy on Non-Academic Misconduct

Purpose and Jurisdiction

1. The University of Guelph is an environment that develops the person, scholar & citizen. This Policy sets out the University’s expectations regarding student conduct as members of the University of Guelph community.

2. In this Policy, a “student” is any person registered in a diploma, undergraduate or graduate program at the University of Guelph or otherwise taking credit or non-credit courses offered by the University of Guelph, or any person who was a student at the time the alleged breach occurred. “Campus” means the physical grounds of either the University’s main campus or the regional campuses. This Policy does not apply to students registered at University of Guelph-Humber programs and attending Humber College.

3. Except as noted in paragraph 4, 5 and 6 this Policy applies to all student non-academic behaviour on campus and to students who are engaged in University programs off campus. Allegations regarding other off campus conduct may be brought forward under this Policy if the violation in question materially affects the safety, integrity or educational interests of the University community or as provided under the Community Standards Protocol.

4. Alleged breaches of this Policy which arise within University residences may in the discretion of Student Housing Services, proceed under the Residence Community Living Standards.

5. Alleged breaches of this Policy which arise at the Ridgetown campus will be subject to the process and procedures specific to that campus.

6. Alleged breaches of this Policy committed by students who are identified as Students-At-Risk by the Student At-Risk Team (“SART”) may at the discretion of the SART team, proceed under the Protocol for Responding to Students At-Risk. Alleged incidents of sexual violence, as defined in the Sexual Violence Policy, will proceed under the Sexual Violence Policy and the Sexual Violence Policy – Procedures Document for Students.

University Community Values

7. The University of Guelph’s core value is the pursuit of truth. It is animated by a spirit of free and open inquiry, collaboration, and mutual respect. It asserts the fundamental equality of all human beings and is committed to creating for all members of its community, an environment that is hospitable, safe, supportive, equitable, pleasurable, and above all, intellectually challenging (University of Guelph Act, 1964). It is expected that all members of the University community will support and enrich these values by interacting with each other in a manner that is respectful, civil and consistent with the following responsibilities.

Failure to abide by these responsibilities, or assisting or conspiring with another individual to act contrary to these responsibilities may result in penalties.

Diversity

8. Students have a responsibility to help create and uphold an environment that respects the diversity and differences of members of our campus, and allows all members to be treated with dignity, worth and respect. An example of this type of responsibility is the requirement to abide by the University’s commitment to the Ontario Human Rights Code and the Human Rights at the University of Guelph Policy 1, including but not limited to refraining from engaging in activities that express intolerance on grounds prohibited by the Human Rights at the University of Guelph Policy.

1 Allegations of breach may be pursued either under this Policy or the applicable human rights policy or legislation

Integrity

9. Students have a responsibility to help maintain the integrity of the University as a community for learning. An example of this type of responsibility is the requirement to abide by all Federal, Provincial and Municipal laws2 and University policies including but not limited to:

a. Drugs and Drug Paraphernalia - to not possess, use, supply or traffic illegal drugs, drug paraphernalia or controlled substances.

b. Alcohol - to possess, purchase, and/or use of liquor by those under the age of 19 is prohibited. The sale or provision of alcohol to anyone under the age of 19 is prohibited. Consumption or open possession of liquor is prohibited on campus other than in those areas where it has been specifically permitted.

c. Smoking - to abide by the University’s policy, Smoking in the Workplace, which includes not smoking or using an electronic cigarette inside any University building or vehicle, or within nine metres of any building entrance or exit.

d. Information Technology (IT) - to use computer login codes or passwords and University IT resources (e.g., computing account or workstation) in accordance with the University’s Acceptable Use Policy.

e. Permits and Identification - to not acquire, use, loan or disseminate University identification, express plans, building access cards, bus passes or parking permits that are stolen, borrowed, cancelled, lost, false, altered or expired. To not loan any of your identification to others nor alter or produce fake identification.

2 Allegations of criminal or other offences may be addressed off-campus under the applicable legislation. The University may also initiate charges under this Policy with respect to the same incident(s) if Campus Community Police in consultation with the Associate Vice-President Student Affairs determine that the allegation in question materially affects the safety, integrity and/or educational interests of the University community.

Learning

10. Students have a responsibility to help support community members’ access to the tools they need to engage in their learning and development, both in and outside of the classroom. An example of this type of responsibility is the requirement to abide by the following:

a. University Property - to respect posted hours and limits on entry where such conditions exist.

b. Property - to not destroy, tamper with, deface or vandalize, monopolize, unlawfully access, remove, obtain through fraudulent means, or possess property not your own, including but not limited to property of the University and personal property.

c. Disruption - to not interfere with the normal functioning of the University, nor to intimidate, interfere with, threaten or otherwise obstruct any activity organized by the University, including classes, or to hinder other members of the University community from being able to carry on their legitimate activities, including their ability to speak or associate with others.

Safety

11. Students have a responsibility to support an environment that enables students to be safe and free from harm3 An example of this type of responsibility is the requirement to abide by the following:

a. Harassment - to treat all members of the University community with respect and without harassment. Harassment is defined as any attention or conduct (oral, written, virtual, graphic or physical) by an individual or group who knows, or ought reasonably to know, that such attention or conduct is unwelcome/unwanted, offensive or intimidating. Examples include but are not limited to bullying and haz ing.

b. Bodily Harm - to not engage in activities that are likely to endanger the health or safety of yourself or another person, or to assault or threaten to assault another person or to knowingly cause another person to fear bodily harm.

c. Firearms and Other Weapons - to not bring on campus any firearms or weapons (examples include but not limited to: BB guns, sling shots, paintball guns, firecrackers, gunpowder or any other forms of unauthorized hazardous materials). Students are not allowed to use any objects to injure, threaten or intimidate a person.

d. Fire and Life Safety Equipment - to not tamper or interfere with, discharge or activate any life safety or fire equipment on campus unless for the purposes of responding to an emergency. Life safety equipment includes but is not limited to defibrillators, fire extinguishers, fire alarm s and emergency phones.

e. Guests - to take reasonable steps to ensure your guests comply with this Policy. Students may be held responsible for any breach of the rules committed by your guests on campus.

3 Alleged incidents of Sexual Violence, as defined in the Sexual Violence Policy, will proceed under the Sexual Violence Policy and the Sexual Violence Policy – Procedures Document for Students.

Interim Suspension

12. If a student has been charged with a breach under this Policy and a student’s conduct raises a reasonable apprehension of harm to the student or to others at the University, or the normal functioning of the University, the President or designate may, in his or her discretion, implement an interim suspension order. A Judicial Hearing will be undertaken as soon as possible and, in any event, no longer than fourteen working days from the laying of the charge.

Process - Main Campus

13. Students who do not comply with these responsibilities may be charged with a breach of this Policy in two ways:

a. a Notice of Offence issued by Campus Community Police, or

b. a charge laid by an individual or by the University.

14. The hearing process under this Policy is carried out by the Judicial Committee based on the principles of fairness, participation and efficiency.

15. The Judicial Committee has authority to issue orders and penalties as outlined in its Terms of Reference. If a student has been found guilty of previous breaches of this Policy or the Residence Community Living Standards, that information is made available to the Judicial Committee for penalty consideration.

Information on the Judicial procedures or common penalties may be obtained from the Judicial Website, or by calling the Judicial Officer, University Centre, at extension 52464 or from the Director’s Office at Ridgetown campus.

Process - Regional Process and Procedures for the Ridgetown campus is available at: http://www.uoguelph.ca/registrar/calendars/diploma/current/
Periodic Review Process

16. This Policy will be reviewed no less frequently than every five years by the Student Rights & Responsibilities Committee. Comments and specific suggestions for amendments or additions to the Policy are welcome at any time and should be referred to the Office of Student Affairs at: st_affs@uoguelph.ca.

Notification of Disclosure of Personal Information to Statistics Canada

Statistics Canada is the national statistical agency. As such, Statistics Canada carries out hundreds of surveys each year on a wide range of matters, including education. It is essential to be able to follow students across time and institutions to understand, for example, the factors affecting enrolment demand at postsecondary institutions. The increased emphasis on accountability for public investment means that it is also important to understand ‘outcomes’. In order to conduct such studies, Statistics Canada asks all colleges and universities to provide data on students and graduates. Institutions collect and provide to Statistics Canada, student identification information (student’s name, student ID number, Social Insurance Number), student contact information (address and telephone number), student demographic characteristics, enrolment information, previous education, and labour force activity. The Federal Statistics Act provides the legal authority for Statistics Canada to obtain access to personal information held by educational institutions. The information may be used for statistical purposes only, and the confidentiality provisions of the Statistics Act prevent the information from being released in any way that would identify a student. Students who do not wish to have their information used can ask Statistics Canada to remove their identifying information from the national database. On request by a student, Statistics Canada will delete an individual’s contact information (name, address, or other personal identifiers) from the PSIS database. To make such a request, please contact us: Via telephone: Monday to Friday 8:30 A.M. to 4:30 P.M. EST/EDST 1-800-263-1136 (Toll Free) or 1-514-283-8300 Via mail: Institutional Surveys Section, Centre for Education Statistics, Statistics Canada, Main Building, SC 2100-K 100 Tunney's Pasture, RHC 13th floor Ottawa, Ontario, K1A 0T6 Via e-mail: PSIS-SIEP_contact@statcan.gc.ca Further details on the use of this information can be obtained from the Statistics Canada Web site http://www.statcan.gc.ca/eng/start

University ID Cards

A University ID Card is issued to each student registered at the University. The following regulations apply:

1. The University of Guelph Card must have: the University of Guelph logo; the cardholder’s surname, first name and identification number; a colour photograph of the cardholder; a barcode for library check-out privileges; a magnetically encoded stripe on the back of the card; and a brief summary of the rules and regulations for use of the card.

2. The Card is the property of the University of Guelph.

3. The Card is not transferable and the cardholder will be responsible for all use made of the Card unless and until written notice is received by Enrolment Services, Office of Registrarial Services.

4. Presentation of the Card will be required before certain University services will be extended. University services may be denied to an individual who does not present a valid card.

5. The Card may not be retained as collateral for any University service except for those services holding and displaying a permit, signed by the Registrar authorizing the withholding of the student, faculty or staff identification card for short periods while that person is utilizing the services offered.

6. A University Card will be issued to each new student. New students who do not obtain a card must contact the ID Card Centre at Enrolment Services, level 3, University Centre for assistance.

7. The University of Guelph ID Card colour photo must show a clear, front view of the applicant’s full face. Hats, headbands or sunglasses may not be worn in the photo. The applicant’s eyes must be open and looking directly ahead. Head coverings worn for religious or medical reasons can be worn but must not cover any part of the applicant’s face. The head covering must not obscure or obstruct a full front view of the applicant’s face, nor can it cast a shadow on the face. Persons with a niqab or burka who require their University ID Card be issued at the University of Guelph campus will have a female staff member photograph and verify the individual’s identity in a private setting.

8. Loss or finding of the University Card should be reported to the ID Card Centre at Enrolment Services.

9. A service charge will be levied for replacement cards.
## XV. Summary of Attendance

### November 1, 2018 Resource Planning and Analysis

#### Undergraduate Programs (UG) - Full-time Enrolment by Semester Level

<table>
<thead>
<tr>
<th>Program</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Diploma Programs</td>
<td>9</td>
<td>7</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>B.A.</td>
<td>1,223</td>
<td>140</td>
<td>1,035</td>
<td>305</td>
<td>886</td>
<td>337</td>
<td>612</td>
<td>214</td>
<td>4,752</td>
</tr>
<tr>
<td>B.A.Sc.</td>
<td>191</td>
<td>8</td>
<td>167</td>
<td>19</td>
<td>152</td>
<td>35</td>
<td>162</td>
<td>45</td>
<td>779</td>
</tr>
<tr>
<td>B.A.S.</td>
<td>123</td>
<td>10</td>
<td>70</td>
<td>24</td>
<td>69</td>
<td>20</td>
<td>49</td>
<td>29</td>
<td>394</td>
</tr>
<tr>
<td>B.B.R.M.</td>
<td>62</td>
<td>3</td>
<td>45</td>
<td>9</td>
<td>50</td>
<td>10</td>
<td>40</td>
<td>16</td>
<td>235</td>
</tr>
<tr>
<td>B.Comm.</td>
<td>782</td>
<td>53</td>
<td>747</td>
<td>146</td>
<td>568</td>
<td>250</td>
<td>591</td>
<td>170</td>
<td>3,307</td>
</tr>
<tr>
<td>B.Comp.</td>
<td>184</td>
<td>19</td>
<td>187</td>
<td>37</td>
<td>65</td>
<td>79</td>
<td>86</td>
<td>49</td>
<td>706</td>
</tr>
<tr>
<td>B.Eng.</td>
<td>312</td>
<td>49</td>
<td>357</td>
<td>86</td>
<td>298</td>
<td>208</td>
<td>173</td>
<td>92</td>
<td>1,575</td>
</tr>
<tr>
<td>B.L.A.</td>
<td>54</td>
<td>2</td>
<td>57</td>
<td>6</td>
<td>64</td>
<td>5</td>
<td>61</td>
<td>10</td>
<td>259</td>
</tr>
<tr>
<td>B.Sc.</td>
<td>1,491</td>
<td>126</td>
<td>1,229</td>
<td>204</td>
<td>1,015</td>
<td>324</td>
<td>800</td>
<td>453</td>
<td>5,642</td>
</tr>
<tr>
<td>B.Sc. (Agr.)</td>
<td>83</td>
<td>2</td>
<td>103</td>
<td>20</td>
<td>88</td>
<td>17</td>
<td>72</td>
<td>31</td>
<td>416</td>
</tr>
<tr>
<td>B.Sc. (Env.)</td>
<td>93</td>
<td>6</td>
<td>65</td>
<td>20</td>
<td>52</td>
<td>43</td>
<td>51</td>
<td>38</td>
<td>368</td>
</tr>
<tr>
<td>D.V.M.</td>
<td>117</td>
<td>0</td>
<td>122</td>
<td>0</td>
<td>120</td>
<td>0</td>
<td>115</td>
<td>3</td>
<td>477</td>
</tr>
<tr>
<td>General Studies</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Honours Equivalency</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Non-Degree</td>
<td>22</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>41</td>
<td>69</td>
</tr>
</tbody>
</table>

#### UG Full-time Enrolment

| Total                        | 19,027 |

#### Undergraduate Programs (UG) - Part-time Enrolment by Semester Level

<table>
<thead>
<tr>
<th>Program</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Diploma Programs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B.A.</td>
<td>77</td>
<td>71</td>
<td>76</td>
<td>99</td>
<td>104</td>
<td>202</td>
<td>48</td>
<td>110</td>
<td>787</td>
</tr>
<tr>
<td>B.A.Sc.</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>11</td>
<td>3</td>
<td>7</td>
<td>32</td>
<td>67</td>
</tr>
<tr>
<td>B.A.S.</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>16</td>
<td>47</td>
</tr>
<tr>
<td>B.B.R.M.</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>B.Comm.</td>
<td>18</td>
<td>23</td>
<td>25</td>
<td>48</td>
<td>45</td>
<td>30</td>
<td>24</td>
<td>116</td>
<td>329</td>
</tr>
<tr>
<td>B.Comp.</td>
<td>3</td>
<td>10</td>
<td>12</td>
<td>27</td>
<td>12</td>
<td>28</td>
<td>14</td>
<td>28</td>
<td>134</td>
</tr>
<tr>
<td>B.Eng.</td>
<td>13</td>
<td>18</td>
<td>17</td>
<td>9</td>
<td>4</td>
<td>9</td>
<td>41</td>
<td>77</td>
<td>188</td>
</tr>
<tr>
<td>B.L.A.</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>B.Sc.</td>
<td>40</td>
<td>37</td>
<td>33</td>
<td>40</td>
<td>47</td>
<td>56</td>
<td>54</td>
<td>166</td>
<td>473</td>
</tr>
<tr>
<td>B.Sc. (Agr.)</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>B.Sc. (Env.)</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>10</td>
<td>29</td>
</tr>
<tr>
<td>D.V.M.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cert. In Applied Statistics</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>General Studies</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Honours Equivalency</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td>Non-Degree</td>
<td>42</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>54</td>
<td>105</td>
</tr>
</tbody>
</table>

#### UG Part-time Enrolment

| Total                        | 2,260 |

#### Guelph-Humber Undergraduate Programs (UGH) - Full-time Enrolment by Semester Level

<table>
<thead>
<tr>
<th>Program</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAMS</td>
<td>146</td>
<td>10</td>
<td>162</td>
<td>18</td>
<td>147</td>
<td>12</td>
<td>145</td>
<td>28</td>
<td>668</td>
</tr>
<tr>
<td>BASC</td>
<td>570</td>
<td>22</td>
<td>517</td>
<td>82</td>
<td>603</td>
<td>64</td>
<td>538</td>
<td>47</td>
<td>2,443</td>
</tr>
<tr>
<td>BBA</td>
<td>211</td>
<td>14</td>
<td>206</td>
<td>28</td>
<td>222</td>
<td>49</td>
<td>215</td>
<td>44</td>
<td>989</td>
</tr>
</tbody>
</table>

#### UGH Full-time Enrolment

| Total | 4,100 |

#### Guelph-Humber Undergraduate Programs (UGH) - Part-time Enrolment by Semester Level

<table>
<thead>
<tr>
<th>Program</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAAG</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>24</td>
<td>30</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>91</td>
</tr>
<tr>
<td>BAMS</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>10</td>
<td>28</td>
</tr>
<tr>
<td>BASC</td>
<td>8</td>
<td>12</td>
<td>9</td>
<td>24</td>
<td>207</td>
<td>94</td>
<td>34</td>
<td>103</td>
<td>491</td>
</tr>
<tr>
<td>BBA</td>
<td>6</td>
<td>5</td>
<td>9</td>
<td>10</td>
<td>12</td>
<td>7</td>
<td>15</td>
<td>61</td>
<td>125</td>
</tr>
<tr>
<td>Non-Degree</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

#### UGH Part-time Enrolment

| Total | 741 |

Last Revision: July 4, 2019
# Ridgetown Campus, Full-time Enrolment by Semester Level

<table>
<thead>
<tr>
<th>Program</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Diploma in Agriculture</td>
<td>160</td>
<td>9</td>
<td>155</td>
<td>91</td>
</tr>
<tr>
<td>Associate Diploma in Applied Equine Case and Management</td>
<td>26</td>
<td>0</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>Associate Diploma in Environmental Management</td>
<td>24</td>
<td>0</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Associate Diploma in Horticulture</td>
<td>26</td>
<td>4</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Associate Diploma in Veterinary Technology</td>
<td>37</td>
<td>2</td>
<td>32</td>
<td>9</td>
</tr>
<tr>
<td>Associate Diploma in Veterinary Technology - Alternate Program</td>
<td>0</td>
<td>28</td>
<td>23</td>
<td>15</td>
</tr>
</tbody>
</table>

## Ridgetown Full-time Enrolment

# Ridgetown Campus, Part-time Enrolment by Semester Level

<table>
<thead>
<tr>
<th>Program</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Diploma in Agriculture</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>48</td>
</tr>
<tr>
<td>Associate Diploma in Applied Equine Case and Management</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Associate Diploma in Environmental Management</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Associate Diploma in Horticulture</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Associate Diploma in Veterinary Technology</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Associate Diploma in Veterinary Technology - Alternate Program</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

## Ridgetown Part-time Enrolment

# Graduate Programs (GR) Enrolment

<table>
<thead>
<tr>
<th>Program</th>
<th>Full-time</th>
<th>Part-time</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor of Philosophy</td>
<td>806</td>
<td>105</td>
<td>911</td>
</tr>
<tr>
<td>Doctor of Veterinary Science</td>
<td>46</td>
<td>3</td>
<td>49</td>
</tr>
<tr>
<td>Graduate Diploma</td>
<td>8</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Master of Applied Nutrition</td>
<td>20</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Master of Applied Science</td>
<td>99</td>
<td>7</td>
<td>106</td>
</tr>
<tr>
<td>Master of Arts</td>
<td>366</td>
<td>10</td>
<td>376</td>
</tr>
<tr>
<td>Master of Bioinformatics</td>
<td>31</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>Master of Biomedical Sciences</td>
<td>27</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>Master of Biotechnology</td>
<td>30</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Master of Business Administration</td>
<td>72</td>
<td>0</td>
<td>72</td>
</tr>
<tr>
<td>Master of Engineering</td>
<td>97</td>
<td>9</td>
<td>106</td>
</tr>
<tr>
<td>Master of Environmental Science</td>
<td>19</td>
<td>4</td>
<td>23</td>
</tr>
<tr>
<td>Master of Fine Arts</td>
<td>42</td>
<td>0</td>
<td>42</td>
</tr>
<tr>
<td>Master of Food, Agricultural and Resource Economic</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Master of Landscape Architecture</td>
<td>43</td>
<td>1</td>
<td>44</td>
</tr>
<tr>
<td>Master of Planning</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Master of Public Health</td>
<td>53</td>
<td>4</td>
<td>57</td>
</tr>
<tr>
<td>Master of Science</td>
<td>868</td>
<td>59</td>
<td>927</td>
</tr>
<tr>
<td>Master of Science Planning</td>
<td>52</td>
<td>9</td>
<td>61</td>
</tr>
<tr>
<td><strong>Total GR Enrolment</strong></td>
<td><strong>2,685</strong></td>
<td><strong>219</strong></td>
<td><strong>2,904</strong></td>
</tr>
</tbody>
</table>

## Total University Enrolment

<table>
<thead>
<tr>
<th>Type of Enrolment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIP Full-time Enrolment (Guelph)</td>
<td>32</td>
</tr>
<tr>
<td>DIP Part-time Enrolment (Guelph)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total DIP Enrolment (Guelph)</strong></td>
<td><strong>32</strong></td>
</tr>
<tr>
<td>UG Full-time Enrolment</td>
<td>18,995</td>
</tr>
<tr>
<td>UG Part-time Enrolment</td>
<td>2,260</td>
</tr>
<tr>
<td><strong>Total UG Enrolment</strong></td>
<td><strong>21,255</strong></td>
</tr>
<tr>
<td>UGH Full-time Enrolment</td>
<td>4,100</td>
</tr>
<tr>
<td>UGH Part-time Enrolment</td>
<td>741</td>
</tr>
<tr>
<td><strong>Total UGH Enrolment</strong></td>
<td><strong>4,841</strong></td>
</tr>
<tr>
<td>Ridgetown Full-time Enrolment</td>
<td>603</td>
</tr>
<tr>
<td>Ridgetown Part-time Enrolment</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Ridgetown Enrolment</strong></td>
<td><strong>613</strong></td>
</tr>
<tr>
<td><strong>TOTAL UNDERGRAD ENROLMENT</strong></td>
<td><strong>26,741</strong></td>
</tr>
<tr>
<td>GR Full-time Enrolment</td>
<td>2,685</td>
</tr>
</tbody>
</table>

---

2019-2020 Undergraduate Calendar  
Last Revision: July 4, 2019
<table>
<thead>
<tr>
<th>Type of Enrolment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GR Part-time Enrolment</td>
<td>219</td>
</tr>
<tr>
<td>Total GR Enrolment</td>
<td>2,904</td>
</tr>
<tr>
<td>TOTAL UNIVERSITY ENROLMENT</td>
<td>29,645</td>
</tr>
</tbody>
</table>
XVI. Administration and Faculty

Administration and Faculty

Chancellor and Chancellor Emerita

Martha Billes, Chancellor
Pamela Wallin, Chancellor Emerita

The Board of Governors

Kevin Golding (Chair)
Richard Appiah
Dr. Martha Billes (Chancellor)
Gerrit Bos
Nancy Brown Andison
Shauneen Bruder (Vice Chair)
Mary Deacon
Theresa Firestone
Lindsey Fletcher
Eleanor Fritz
Paul Gallagher (Vice Chair)
Paul Gibson
Bill Hogarth
Nicholas Manuel
Dr. Stuart McCook
Dr. Coral Murrant
Prashant Pathak
Neil Parkinson
Carol Poulsen
Dr. Byron Sheldrick
Dr. Deb Stark
Cameron Stotts
Irene Thompson
Dr. Franco Vaccarino (President and Vice-Chancellor)

Genevieve Gauthier-Chalifour (University Secretary; non-voting)

Administrative Officers

Office of the President

F. Vaccarino, President and Vice-Chancellor, B.SC. (TOR.), M.S.C., PH.D (MCG.)
M.M. Murphy, Legal Counsel, B.SC. (ST. F.X. ANTIGONISH, N.S.), LLB (W.ONT.)

University Secretariat

G. Gauthier-Chalifour, University Secretary, B.A. (W. LAUR.), M.A. (GUELPH)
S. Willey-Thomas, Associate University Secretary, B.A., M.I.P.P. (W. LAUR.)
B. Doucet, Associate University Secretary, B.F.A (RYERSON), J.D. (W.ONT.)

G. Brown, Acting Assistant University Secretary & Privacy/Judicial Officer, M.A. (GUELPH), J.D. (OTT.)

K. Ingoldsby, Assistant University Secretary & Privacy/Judicial Officer, B.A.(W.ONT), CHRP (FANSHAVE)

Office of the Provost and Vice-President (Academic)

C. Yates, Provost and Vice-President (Academic), B.A. (WINN.), M.A. (QU), PH.D. (QU)

Office of the Provost and Vice-President (Academic)

C. Dewey, Associate Vice-President (Academic), Professor, D.V.M., M.S.C. PH.D. (GUELPH)
R. Darling, Registrar, B.A., M.A. (GUELPH)
P. Tersigni, Director, Academic Programs and Policy, B.A., M.A. (GUELPH)
M. Fach, Director, Open Learning, M.B.A. (ATHABASCA), M. Ed. (BROCK)
L. Mitchell, Director, Centre for International Programs and International Office, B.SC. (AGR.), M.S.C, PH.D. (GUELPH)
S.G. Dorr, Coordinator of the Undergraduate Academic Information Centre, B.A., M.A. (GUELPH), M.S. (KANSAS ST.)

I. Newby-Clark, Director, First Year Seminars, B.SC. (TOR.), PH.D. (WAT.)

Office of the Associate Vice-President (Student Affairs)

B. Whiteside, Associate Vice-President (Student Affairs), B.A., M.A. (GUELPH)
S. McRoberts, B.A., M.A, Department of Athletics
J. Westlake, M.A, Interim Case Director
V. Trew, RECE, ECERC, B.A., M.A, Director, Child Care and Learning Centre
I. Thompson, B.A., M.B.A, Director, Student Housing Services

L. Schnarr, M. A., Director Student Life:
A. Burnett, RN, MSc, Director, Student Wellness Services:
J. Ferguson, Interim Director, Co-operative Education and Career Service

Office of the Assistant Vice-President (Faculty and Academic Staff Relations)

T. Jandrisits, Associate Vice-President Faculty and Academic Staff Relations, B.S.C. (GUELPH), CHRP.

Office of the Assistant Vice-President (Graduate Studies)

B. Bradshaw, Assistant Vice-President (Graduate Studies), Associate Professor, B.A. (TRENT), PH.D (GUELPH)

Office of the Assistant Vice-President (Institutional Analysis Research)

K. Menard, Assistant Vice-President (Institutional Research and Planning), B.A. (CAR.), M.A., PH.D. (WAT.)

C.A. Beattie, Research Associate, B.S.C. (GUELPH)
M. Kupferschmidt, Research Associate, B.A. (GUELPH)
R. Heenan, Manager of Government Reporting and Data Products, B.A.H. (TOR), M.B.A. (MAC)

University of Guelph-Humber

J. Walsh, Vice-Provost, Chief Academic Officer and Chief Executive Officer, University of Guelph-Humber, B.A. (THAMES), M.B.A., PH.D. (W.ONT.)

University Library

R. Graham, University Librarian, B.S.C. (WILBERFORCE), M.S. (UIUC)
B. McDonald, Associate University Librarian (Academic), B.A. (TRENT), M.L.I.S. (DAL.)
M.J. D’Elia, B.A. Acting Associate University Librarian (Research), B.A. (W.ONT.), MLIS (DAL.)

Office of the Vice-President, External

D. Atin, Vice President, External, B.A. (W.ONT.)
J. Moreton, Associate Vice-President, (Advancement), B.A. (GUELPH), M.A. (W.LAUR.)

Alumni Affairs and Development

J. Moreton, Associate Vice-President, (Advancement), B.A. (GUELPH), M.A. (W.LAUR.)
J. Barrett, Associate Director, Major Gift Strategy, B.A., M.A. (GUELPH)

W. Jespersen, Manager, Advancement Communications, MEDIA DIP. (SHERIDAN)
R. Moroz, Associate Director, Information Systems, B.MIS. (RYERSON)
W. Turner, Associate Director, Stewardship, B.COMM (GUELPH)

Communications and Public Affairs

News Service & Media Relations

L. Bona Hunt, Director, Integrated Communications, B.SC. (UTAH), M.A. (GUELPH)
D. Healey, Manager, News Service, B.A. (GUELPH), M.A. (W.ONT.)
H. James, News Service Officer, B.A. (H. (TOR.), M.A. (W.ONT)
R. O’Flanagan, Staff Writer, B.A. (SASK.)

Marketing & Digital Engagement

A. Miller, Director, Marketing & Digital Engagement
J. Harris, Acting Manager, Web & Social Media, DIP. (DURHAM)
A. Scott, Web Designer. B.F.A. (NSCAD)

Portico Alumni Magazine

L. Bona Hunt, Director, Integrated Communications, B.SC. (UTAH), M.A. (GUELPH)
A. Vowles, Staff Writer, B.SC. (GUELPH)

Internal Communications

J. Hennessy, Internal Communications Co-ordinator, B.A. (WAT.)

Administrative Support

C. Kitching, Administrative Assistant

Community Relations

C. Alexander, Special Projects Manager, B.B.A. (SFU)

Office of the Vice-President (Finance and Administration)

D. O’Leary, Vice-President (Finance and Administration), B.B.A. (UNB.)
R.J. Carter, Associate Vice-President (Physical Resources), M.A., SC., PENG., CEFP
M. Harley, Assistant Vice-President (Human Resources)

Vacant, Assistant Vice-President (Finance and Services)

E. Townsend, Executive Director (Hospitality Services)
D. Lee, Director, Campus Community Police, Emergency Management and Fire Safety

Office of the Vice-President (Research)

M. M. Campbell, Vice-President (Research) and Professor, B.S.C., PH.D. (GUELPH), M.A. OXON (OXFORD)
P. Kelly, Associate Director, Residence Life, B.A. (BROCK), M.Ed. (OK. STATE)
L. Piper, Manager, Residence Admissions and Marketing, B.A. (Hons.(MCM.)), M.A. (GUELPH)
J. West, Manager, Research and Special Projects, B.A., B.ED., M.ED. (WIND.), Dip. Research Methodology (GEOGR.
W. Illsley, Manager, Facilities
J. Mead, Manager, Desk Services, B.A. (GUELPH)
M. Eisenbach, Manager, Academic Learning Communities, B.A.SC. (GUELPH)
B. Ingoldsby, Residence Programme Co-ordinator, B.A. (GUELPH), B.ED. (W. ONT.)
K. Lennan, South Area Co-ordinator, B.A.H. (GUELPH)

Residence Life Managers
A. Adams, B.A.SC. (GUELPH)
M. Bird, B.A. Hons (McM.), M.A., M.B.A. (GUELPH)
S. Bradley, B.A. (W. LAUR.), B.ED. (TOR.)
J. Dalton, B.A. Hons. (GUELPH), M.S.W. (W. LAUR.), R.S.W.
J. Nayda, B.A. (W. LAUR.), M.A. (GUELPH)
B. Robbins, Community Life Manager, Family Housing and West Residence
S. Traill, B.MUS. (W. LAUR.)

Student Life
L. Schnarr, Director, M.A.(GUELPH)
A. Baksh, Cultural Diversity Advisor
R. Beattie, Coordinator, Transition Programs
C. Coppaway, Aboriginal Liaison
G. Cotler, Multi-Faith Resource Team (Hillel-Jewish)
S. DeMoor, Multi-Faith Resource Team (Guelph Campus Ministry)
J. Doner, Manager, Community Engagement and Global Citizenship, B.A. (TRENT), B.ED. (QU.), M.ED. (OiSE)
C. Doran, Coordinator, Experiential Learning Programs, B.SC. (BROCK)
K. Eisenbach, Information Desk Coordinator, B.A. (GUELPH), M.A. (GUELPH)
G. Fick, Local Engagement Coordinator, B.A.
K. Hofer, Manager, Off Campus Living, B.A.SC. (GUELPH), M.S.W. (W.LAUR.), R.S.W.
N. Hood, Coordinator, Support Programs
D. Kemp, Administrative Assistant
C. Litchmore, Coordinator, Cultural Diversity Programs
B. MacDougall, Lead Coordinator, Student Volunteer Connections
H. Mitchell, Coordinator, New Student Advising
D. Poulin, Specialist, Experiential Learning, B.A. (GUELPH)
R. Routledge, Manager, Student Transition Office
M. Sager, International Student Advisor
Y. Sagnia, Coordinator, Mentorship and Engagement Programs
M. Shallard, Coordinator, Aboriginal Programs
R. Steiner, Multi-Faith Resource Team (Chabad-Jewish)
S. Thibodeau, Leadership Education and Development (LEAD) Advisor , B.A. (GUELPH), M.Sc. (GUELPH)
J. Vanderberg, Coordinator, Multi-Faith Programs, Multi-Faith Resource Team (Guelph Campus Ministry)
C. Wehkamp, Manager, Office of Intercultural Affairs , B.SC., M.S.C., PH.D. (GUELPH)
C. Wever, Coordinator, Citizenship and Community Based Learning
N. Young, Aboriginal Student Advisor

Student Wellness (Health Services, Counselling Services, Accessibility Services, Wellness Education and Promotion, Student Support Network, and Health and Performance Centre)
A. Burnett, Director, B.SC.N. (RYERSON), M.SC.N. (D’YOUVILLE)
D. Reid, Manager Business Operations, CPA, CA, B.COM. (GUELPH)
H. Friesen, Manager Clinical Services, RN, B.SC.N. (RYERSON) CPMHN (c)
T. Schmidt, Manager Counselling Services, B.SC. (WAT.), M.S.W. (LAURIER)
B. Praamsma-Townshend, Manager Student Accessibility Services, B.A. (Guelph), MSW (TOR.)
M. Bowman, Manager Wellness Education and Promotion, B.A. (GUELPH)

Undergraduate Academic Information Centre
S.G. Dorr, Co-ordinator, B.A., M.A. (GUELPH), M.S. (KANSAS ST.)

University Centre

L. Barrington, Executive Secretary, Secretary to the Board
M. Hahn, Manager, Building and Reservations
J. Lamb, Assistant Manager, Operations
P. John, Business Manager, B.COMM., C.G.A.
J.M. Calvert, Manager, Operations

College of Arts
S. Brennan, Dean and Professor, B.A. (DAL.), M.A., PH.D. (ILLINOIS.)
R. Mueller, Associate Dean, (Academic) and Associate Professor, B.A. (BR.COL.), M.A. (MCG.), PH.D. (QU.)
A. Bailey, Dean of Research and Graduate Studies, Associate Professor, B.A., M.A. (OXON), PH.D. (CALG.)
J. Walsh, Vice-Provost (Guelph/Humber), B.A. (THAMES POLYTECH.), M.B.A. (W.ONT.)
S. Sabatini, Manager, Research and Communication, B.A., M.A. (GUELPH), PH.D. (WAT.), Associate Graduate Faculty, (Guelph-Humber MFA Creative Writing).
TBA, Manager, Finance and Administration
M. Edwards, Bachelor of Arts Program Counsellor, B.B.A. (W.LAUR.)
J. Dalton, Assistant Professor, B.SC. (UTKAL, INDIA), M.S.A. (ROURKELA INDIA), PH.D. (GUELPH)
S. Lapenskie, Assistant Bachelor of Arts Program Counsellor, B.A. (WONT.), M.F.A. (GUELPH)
P. Swidinsky, Assistant Bachelor of Arts Program Counsellor, B.SC. (GUELPH)
B. Lawrence, Bachelor of Arts and Science Program Counsellor, B.SC. (GUELPH), B.ED. (WONT.)

Department of History
C. Carstairs, Professor and Chair of the Department, B.A. (HARVARD), M.A., PH.D. (TOR.)
D.T. Andrew, University Professor Emerita, B.A. (C.C.NY.), M.SC. (LOND.), PH.D. (TOR.)
K.M. Cassidy, Professor Emeritus, B.A. (MONTR.), M.A., PH.D. (TOR.)
T.A. Crowley, University Professor Emeritus, B.A. (BISHOP’S), M.A. (CAR.), A.M., PH.D. (DUKE)
P.D.W. McCalla, University Professor Emeritus, B.A. (QU.), M.A. (TOR.), D. PHIL. (OXON.)
D.R. Murray, University Professor Emeritus, B.A. (BISHOP’S), M.A. (EDIN.), PH.D. (CAMB.)
R.M. Reid, Professor Emeritus, B.A. (CAR.), M.A., M.PHIL. (TOR.)
G.A. Stelter, University Professor Emeritus, B.A. (MORAVIAN), B.D., PH.D. (ALTA+)
G.C. Boehnert, Professor Emeritus, CD, M.A., M.A. (WONT.), M.A. (WONT.), M.Phil. (WAT.), PH.D. (LOND.)
D.R. Farrell, Professor Emeritus, B.A., M.A. (WIS.), PH.D. (WONT.)
C.J. Munford, Professor Emeritus, B.A., M.A. (W. RESERVE), D.PHIL. (LEIP.)
E.G. Reiche, Professor Emeritus, B.A. (WONT.), PH.D. (DEL.)
T.H. Abraham, Associate Professor, B.SC. (MCM.), M.A., PH.D. (HIPST, TOR.)
W.S. Cormack, Associate Professor, B.A. (CALG.), M.A. (CAR.), PH.D. (QU.)
E.L. Ewan, Professor, University Research Chair, B.A. (QU.), PH.D. (EDIN.)
J.E. Fraser, Associate Professor and Chair of Scottish Studies, B.A. (TOR.), M.A. (GUELPH), PH.D. (EDIN.)
P.A. Goddard, Associate Professor, B.A. (BR.COL.), D.PHIL (OXON.)
A. Gordon, Professor, B.A. (TOR.), M.A., PH.D. (QU.)
M.C. Hayday, Professor, B.A. (TOR.), M.A., PH.D. (OTT.)
S.C. Humble-Ferreira, Associate Professor, B.A. (TRENT), M.A., PH.D. (JOHNS HOPKINS)
K.E. Inwood, Professor, Joint appointment with Department of Economics, B.A. (TRENT), M.A., PH.D. (TOR.)
K.J. James, Professor, B.A., M.A. (MCG.), PH.D. (EDIN.)
F.J. Kolapo, Associate Professor, B.A., M.A. (AHMADU BELLO), PH.D. (YORK, CAN.)
S. Lachapelle, Professor, B.SC., M.A. (MONTREAL), PH.D. (NOTRE DAME)
B.A. Luby, Assistant Professor, B.A. (QU.), M.A., PH.D. (YORK)
L.L. Mahood, Professor, B.A. (SASK.), M.LITT., PH.D. (GLAS.)
S.G. McCoik, Professor, B.A. (TOR.), M.S. (RENSSELAER P.I.), M.A. (PH.D. (PRINCETON))
A. McDougall, Professor, B.A., M.A., D. PHIL. (OXON.)
J. Murray, Professor, B.A. (HONS) (BR.COL.), M.A., PH.D. (TOR.)
S. Nance, Professor, B.A., M.A. (S.FRASER), PH.D. (UC BERKELEY)
J.S. Palsetia, Professor, B.A., M.A., PH.D. (TOR.)

2019-2020 Undergraduate Calendar
Department of Molecular and Cellular Biology

M. Coppolino, Associate Professor and Chair of the Department, B.Sc. (WAT.), M.Sc., Ph.D. (TOR.)

J.D. Bewley, University Professor Emeritus, B.Sc., Ph.D., D.Sc. (LOND.), F.R.S. (CAN.)

D.M. Britton, University Professor Emeritus, B.A. (TOR.), Ph.D. (VIRG.)

C.W. Forsberg, Professor Emeritus B.Sc., M.Sc. (SASK.), Ph.D. (MCG.)

J.S. Greenwood, Professor Emeritus, B.Sc., M.Sc. (MCM.), Ph.D. (CALG.)

P.J. Krell, University Professor Emeritus, B.Sc., M.Sc. (CAR.), Ph.D. (DAL.)

J.S.L. Lam, University Professor Emeritus, B.Sc., Ph.D. (CALG.)

R.Y.C. Lo, Professor Emeritus, B.Sc., Ph.D. (ALTA.)

A. Mellors, Professor Emeritus, B.Sc., Ph.D. (LIVERPOOL)

R.N. Nazar, Professor Emeritus, B.Sc., Ph.D. (TOR.)

L. Peterson, University Professor Emeritus, M.Ed., M.Sc. (ALTA.), Ph.D. (CALIF.)

J.P. Phillips, Professor Emeritus, B.Sc. (EMPORIA), M.Sc., Ph.D. (UTAH ST)

E.J. Robb, Professor Emeritus, B.Sc. (YORK), Ph.D. (BR.COL.)

B.H. Sells, University Professor Emeritus, B.Sc. (CAR.), M.A. (QU.), Ph.D. (MCG.), F.R.S. (CAN.)

F.J. Sharam, Professor Emeritus, B.Sc. (GUELPH), Ph.D. (W.ONT.)

R.M.W. Stevenson, Professor Emeritus, B.Sc., Ph.D. (MANIT.)

J.M. Wood, University Professor Emeritus, B.Sc. (VIC.B.C.), Ph.D. (EDIN.)

T. Akhtar, Assistant Professor, Ph.D. (U of Florida)

E. Allen-Vercoe, Professor, B.Sc (University of London), Ph.D. (Open University, UK)

J. Bag, Adjunct Professor, B.Sc., M.Sc., Ph.D. (CALC.)

M. Baker, Professor, B.Sc. (W.LAUR.), M.Sc., Ph.D. (WAT.)

A.J. Bendall, Associate Professor, B.Sc. (CANBERRA), Ph.D. (SYDNEY)

M. Brauer, Associate Professor, B.Sc. (CALG.), M.Sc., Ph.D. (WISC.)

M. Campbell, Professor and VP Research, MA (OXFORD), B.Sc., Ph.D. (GUELPH)

A.J. Clarke, Professor, B.Sc., M.Sc., Ph.D. (WAT.)

J.J. Colasanti, Associate Professor, B.Sc., Ph.D. (W.ONT.)

G. Cox, Assistant Professor, B.Sc., Ph.D. (LEEDS)

J. Dawson, Professor, B.Sc. (W.LAUR.), Ph.D. (ALTA.)

M. Emes, Professor, B.Sc., Ph.D. (SHEFFIELD)

J. Geddes-Mcallister, Assistant Professor, B.Sc., M.Sc. (LETHBRIDGE), Ph.D. (BR. COL.)

S. Graether, Associate Professor, B.Sc., M.Sc., Ph.D. (QU.)

G. Harauz, Professor, B.A.SC., M.Sc., Ph.D. (TOR.)

N. Jones, Professor, B.Sc. (GUELPH), Ph.D. (TOR.)

P.D. Josephy, Professor, B.Sc. (TOR.), Ph.D. (BR.COL.)

A. Kaushik, Adjunct Professor, B.V.SC., M.V.SC. (HISBA), D.V.SC. (INSECT), PARIS)

C. Khursigara, Associate Professor, B.Sc., Ph.D. (MCG.)

M.S. Kimber, Associate Professor, B.Sc., Ph.D. (TOR.)

J. Lalonde, Assistant Professor, B.A. (OTT.), M.A., Ph.D. (MCG.)

R. Lu, Associate Professor, B.Sc. (WUHAN), M.MED. (BEIJING), Ph.D. (SASK.)

J. Mathur, Associate Professor, B.Sc., M.Sc. (LUCKNOW U, INDIA) Ph.D. (GORAHPUR, INDIA)

B. Meng, Associate Professor, B.Sc., M.Sc., (HEBEI AGRIC.), Ph.D. (CNEL)

A.R. Merrill, Professor, B.Sc. (LETH.), Ph.D. (OTT.)

R.D. Mosser, Associate Professor, B.Sc., Ph.D. (WAT.)

R.T. Mullen, Professor, B.Sc., Ph.D. (ALTA.)

L.M. Mutharia, Associate Professor, B.Sc., M.Sc. (NAIROBI), Ph.D. (BR. COL.)

A. Nassau, Associate Professor, B.Sc., M.Sc. (AMST), Ph.D. (LEIDEN)

M.L. Perreault, Assistant Professor, M.Sc., Ph.D. (MCM.)

S.J. Rothstein, Professor, B.A. (SWARTHMORE), Ph.D. (WISC.)

S. Ryan, Assistant Professor, Ph.D. (U of OTT.)

S. Seah, Associate Professor, B.Sc., M.Sc. (SINGAPORE), Ph.D. (SHEFF.)

R. Shapiro, Assistant Professor, B.Sc. (MCG.), Ph.D. (TOR.)

I. Tetylow, Associate Professor, B.Sc. (NEWCASTLE), Ph.D. (BANGOR)

J. Uniacke, Associate Professor, Ph.D. (CDIA)
School of Environmental Design and Rural Development

School of Environmental Design and Rural Development

School of Environmental Design and Rural Development
A corequisite is a course where the content is integrated with that of another course such that the courses must be taken simultaneously.

Course
A course is an organized unit of study extending over a semester, (e.g. Economics ECON*1100).

Course Attempt
A course attempt reflects the situation where a student has completed courses either satisfactorily or unsatisfactorily.

Course Equate
Equate indicates a course identical to the one under which it is listed. The course may have been re-numbered or may be cross-listed under two subject areas. Students will not be permitted to register in both equated courses.

Course Level
Course level denotes the seniority of a course. 1000-level and 2000-level courses are considered first and second year courses. 3000-level and 4000-level courses are considered senior level courses.

Course Load
Course load denotes the total weight of the credits in which a student is enrolled determining part-time or full-time status. Courses taken via Letter of Permission are not used to calculate course load.

Course Restriction
A restriction is a "rule" that is placed on the computer system (Colleague) at the direction of an academic department so that particular students may or may not register in particular courses. The course may be restricted because there is sufficient overlap in content with another course so that it is inappropriate for the student to take a similar course for credit. In a different instance, the course may be restricted by "Instructor Consent" so that the student must discuss the special requirements of the course with the instructor before enrolling. Or, alternatively, the restriction may reflect a "Priority Access" designation for enrolment management purposes. (See Priority Access).

Course Section
A course section is a subgroup of a course that denotes time and location.

Course Selection
Course selection is the process by which students select course sections for the succeeding semesters.

Credit
A credit is a unit of academic measurement equivalent to a single-weighted one-semester course.

Credit Standing
Credit standing (CRD) denotes that the student has successfully completed a course, but was not assigned a numerical grade.

Cumulative Average
Cumulative Average is calculated by dividing the weighted course total by the total credit attempts over all semesters (see Weighted Course Total).

Degree Program
See Program and Baccalaureate.

Deferred Privilege
A deferred privilege (DEF) is a temporary extension of time granted at the discretion of a Program Committee to a student for completion of the requirements of a course, normally for illness or compassionate reasons.

Diploma (degree-level)
See Secondary Area of Study.

Diploma Program Calendar
The Diploma Program Calendar is an annual publication containing official information about Associate Diploma Programs and regulations of the University of Guelph and Ridgetown campus.

Drop Period
The drop period for single semester courses starts at the beginning of the add period and extends to the 40th class day where students are permitted to drop a course for the current semester.
Elective
An elective is a course, acceptable within the program but chosen at the discretion of the student.

Equate
See Course Equate.

Faculty Advisor
See Chapter VII - Academic Advising.

Grade Report
A grade report is released by the Registrar to each student at the conclusion of a semester via WebAdvisor. It notes the courses attempted and the grades assigned (if applicable).

Hiatus
See Withdrawal.

In-course Student
In-course refers to a student enrolled in a program of study at the University.

Mailing Address
The mailing address is a temporary address used for mailing if one is recorded; otherwise the home address is used.

Minor
See Secondary Area of Study.

New Student
New student refers to a student who has never before been registered at the University of Guelph.

Prerequisite
A prerequisite is a prior requirement for entry into a course. Where a course is specified as a prerequisite, pass standing in the course is required.

Priority Access
Priority Access is the process by which a department implements course restriction rules in order to limit registration in a course where enrolment demand habitually exceeds course capacity and where there is demonstrated need to restrict access to a particular cohort of students on a priority basis. In general, course restrictions are clearly defined in the calendar course listings so that students are advised in advance of the intended audience for the course.

Program
A program is a structure of courses leading to a University degree (e.g. B.A.Sc. program).

Program Counsellor
See Chapter VII - Academic Advising.

The Program Counsellor is someone who assists students in the development of educational plans which are realistic and compatible with their life goals by helping to identify and assess alternatives and consequences of decisions, and providing interpretation of regulations applying to the specific degree program.

Registration
Registration is the official enrolment of students in the University for a particular semester, and includes the selection of course sections and the payment of tuition fees and, where appropriate, other University fees.

Required to Withdraw
See Rustication.

Restricted Elective
A restricted elective is a course which must be chosen from a stated group of courses to satisfy the program requirements.

Restriction
See Course Restriction

Rustication
A defined period of time during which the student is not eligible to register in their current academic program as a result of an academic review decision. After the period of rustication the student must apply for re-admission to the University of Guelph.

Schedule of Dates
The schedule of dates is a list of significant dates at the University, approved by Senate.

Schedule of Studies
A schedule of studies is the requirements for specializations, majors, minors, and course offerings. The curriculum of a secondary area of study may be composed of elements of the core course offerings of a major, or may be a coherent package of courses organized around a theme, a course of study that bridges two or more disciplines, and/or a training program for a particular skill. Secondary Area may be a minor or degree-level certificate or diploma.

Secondary Area of Study
An identified set and sequence of courses, and/or other units of study, research and practice within an area of disciplinary or interdisciplinary study, which is completed on an optional basis while fulfilling the requirements for the awarding of a degree, and may be recorded on the graduate's academic record. The curriculum of a secondary area of study may be composed of elements of the core course offerings of a major, or may be a coherent package of courses organized around a theme, a course of study that bridges two or more disciplines, and/or a training program for a particular skill. Secondary Area may be a minor or degree-level certificate or diploma.

Semester
A semester is an independent academic period of 15 weeks, half of an academic year; similar to a term at other universities. Summer semester is from May to August. Fall semester is from September to December. Winter semester is from January to April. (see Weighted Course Total)

Semester Average
Semester Average is calculated by dividing the weighted course total by the total credit attempts in the semester (see Weighted Course Total).

Semester Level
See Class Level.

Session
A session is an academic period of 7 weeks within the Summer semester, including 6 weeks of classes and 1 week of examinations. Courses presented during a session will be equivalent to a regular semester offering.

Specialization
For specialization see schedule of studies.

Subject
A subject is a defined sector of study composed of 1 or more courses within a discipline.

Supplemental Privilege
Supplemental privileges are granted at the discretion of the Program Committee, and in consultation with the instructor, affording a student who has received a failing grade on the original course attempt, the opportunity to obtain credit for the course while retaining the original failing grade.

Transcript
A transcript is an official document prepared by the Registrar recording a student's courses and grades. After convocation, the degree earned including the area(s) of specialization (major, minor, area of concentration, area of emphasis), graduation standing, and the conferral date are noted on the transcript.

Two-Semester Course
A two-semester course is a course that is taken over 2 continuous semesters and counts as 2 course attempts for classification, continuation of study and calculation of fees. Two semester courses cannot be split.

Undergraduate Calendar
The undergraduate calendar is an annual publication containing official information about the undergraduate academic programs and regulations of the University.

Weighted Course Total
Weighted Course Total is the sum of the credit weights multiplied by the grade received in each course.

Withdrawal

Withdrawal of registration for an academic term after the start of classes.

Withdrawal with Failure

Withdrawal with failure may be applied to a course or an academic term. The notation "WF" will appear against the course(s) in the grade field on the official transcript.
Revisions

On the basis of information received from program committees, colleges or departments the 2019-2020 Undergraduate Calendar includes the following revisions:

Note
Those who may have used the PDFs to download and print off these calendar sections are advised to re-print the revised sections accordingly. Please be aware sectioning, page numbering, table of contents may have changed.

February 6, 2019
Initial publication of the 2019-2020 Undergraduate Calendar.

April 8, 2019
Second publication of the 2019-2020 Undergraduate Calendar.
• Chapter 8 - Undergraduate Degree Regulations and Procedures -- Withdrawal -- updating Voluntary Withdrawal and Cancelling a semester registration.
• Chapter 16 - Administration and Faculty - Changes and updates to various listings.

May 31, 2019
Third publication of the 2019-2020 Undergraduate Calendar.
• Chapter 10 - Updates to all Coop Programs.

July 4, 2019
Forth publication of the 2019-2020 Undergraduate Calendar.
• Chapter 6 - Schedule of Fees - updated
• Chapter 8 - Undergraduate Degree Regulations and Procedures -- Drops -- updated
• Chapter 16 - Administration and Faculty - Changes and updates to various listings.

July 19, 2019
Fifth publication of the 2019-2020 Undergraduate Calendar.
• Chapter 12 - Course Descriptions - Added the following courses -- ENGG*3270, ENVS*4030, FIN*3100, PBIO*4290, HTM*2220, UNIV*2100, UNIV*3140
• Chapter 16 - Administration and Faculty - Changes and updates to various listings.